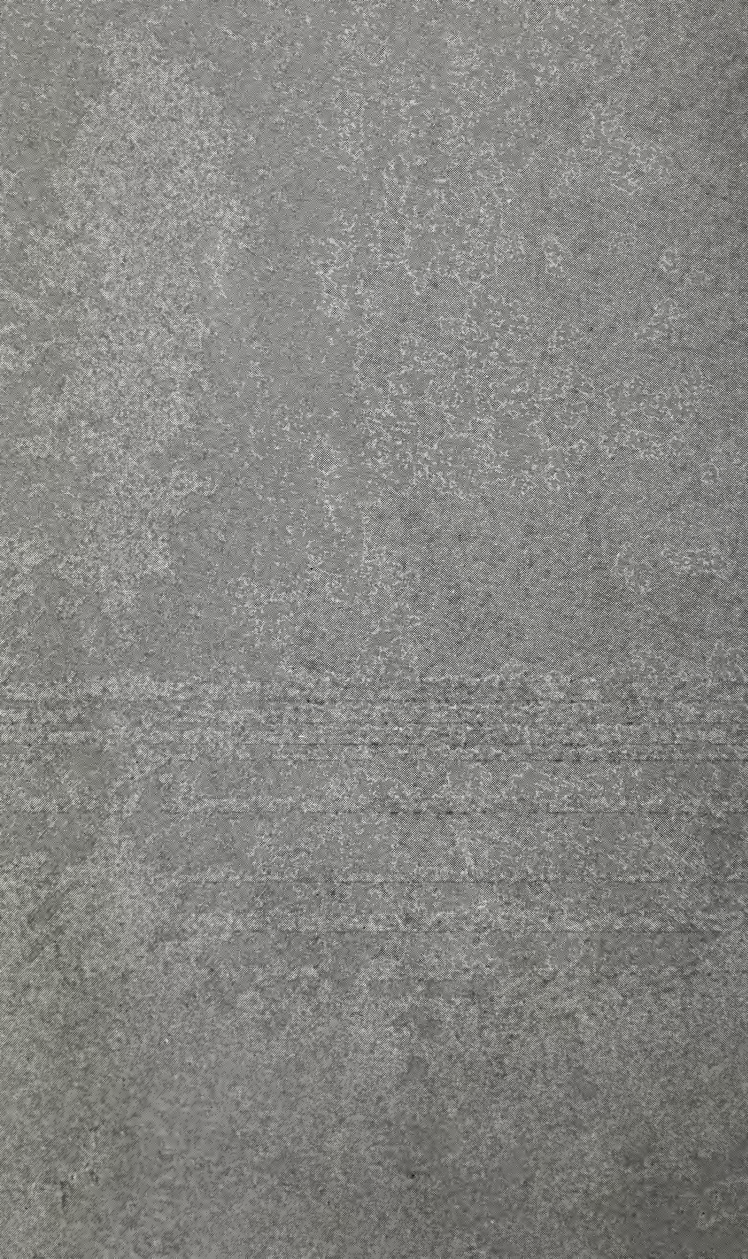


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Do not assume content reflects current scientific knowledge, policies, or practices.



343

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Directory of Field Activities
of the
Bureau of Biological Survey
1939

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Miscellaneous Publication No. 343



THIS DIRECTORY is issued for the information of persons interested in the field activities of the Bureau of Biological Survey. There are included a brief statement on the history and functions of the Bureau, an organization chart (p. II), and a list of the administrative officials. The field activities are listed by States and localities, all arranged alphabetically. For each there are given (1) its designation and the address and name of the official in charge, (2) a brief statement of its functions, and (3) the names of cooperating agencies.

Washington, D. C.

Issued June 1939

Directory of Field Activities
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Bureau of Biological Survey
1939



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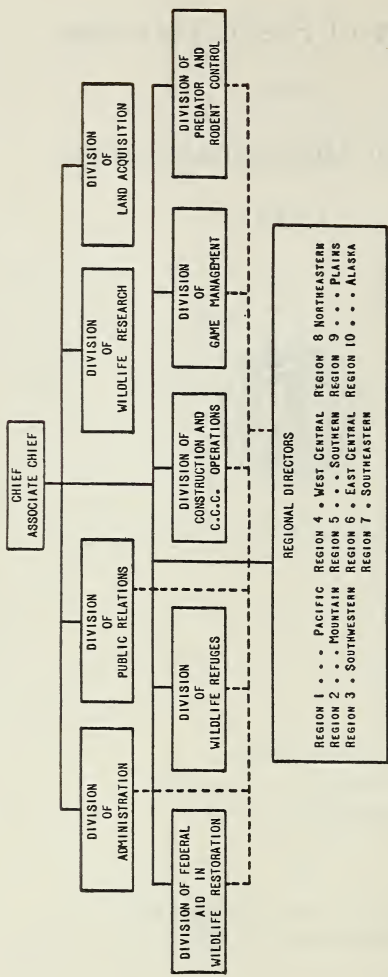
United States
Department of Agriculture
Washington, D. C.



United States Government Printing Office
Washington, D. C. : 1939

For sale by the Superintendent of Documents, Washington, D. C., Price 20 cents

BUREAU OF BIOLOGICAL SURVEY



FIELD SERVICE

ABOUT 700 REGULAR AND 1,300 SEASONAL OR PART-TIME EMPLOYEES, AND DEPUTY GAME WARDENS AS NEEDED (FROM ABOUT 1,500 APPOINTEES). 10 OFFICES OF REGIONAL DIRECTORS; 248 NATIONAL WILDLIFE REFUGES AND 5 HEADQUARTERS FOR SUPERVISING C. C. C. WORK THEREON; 47 HEADQUARTERS OF LAW-ENFORCEMENT OFFICERS; 21 OF PREDATOR AND RODENT CONTROL DISTRICTS; 9 OF INSPECTORS FOR FEDERAL AID IN WILDLIFE RESTORATION; 3 OF LAND-ACQUISITION DISTRICTS; AND 39 RESEARCH HEADQUARTERS OR LABORATORIES, OR WILDLIFE EXPERIMENT STATIONS.

Directory of Field Activities of the Bureau of Biological Survey, 1939

CONTENTS

	Page		Page
Functions of the Bureau.....	1	Field activities.....	15
Historical.....	2	Summary and index of field activi-	
Organization.....	3	ties.....	109
Administrative organization.....	12	Index of personnel.....	115

FUNCTIONS OF THE BUREAU

The Bureau of Biological Survey is the agency of the Federal Government concerned with the welfare of all forms of the country's resources in vertebrate wildlife, excepting fishes and marine mammals, which are under the jurisdiction of the Bureau of Fisheries of the Department of Commerce. This "wildlife protection service," a unit of the Department of Agriculture, is called the Bureau of Biological Survey in recognition of a form of its scientific work essential to its other activities—making surveys of the major biological regions of the continent. The Survey's complex and diversified work is based on the results of investigation in practically all parts of the United States and in adjacent countries. The more important phases embrace specialized research, propagation experiments with game and fur species, wildlife disease investigations, leadership in the control of injurious animals, acquisition and maintenance of bird refuges and big-game preserves, and administration of wildlife conservation laws. In its service to the public the Bureau is meeting constantly increasing requests for information about wildlife—about the relation of the various species to farming; the propagation of fur and game species in captivity; the control

of wildlife diseases; the protection of valuable, harmless, and interesting forms in the wild; and the repression of those that have harmful or economically objectionable tendencies.

HISTORICAL

Studies of the migration and distribution of birds and of their food habits had been formerly pursued by committees of the American Ornithologists' Union, which was organized in 1883. The efforts of these committees resulted in the establishment, on July 1, 1885, of a Section of Economic Ornithology in the Division of Entomology of the Department of Agriculture. Within a year the new organization became an independent Division of Economic Ornithology and Mammalogy and a recognized research agency, studying the migratory movements, ranges, economic relations, and general habits of both birds and mammals. In 1896 the Division was given its present designation, "Biological Survey"; in 1905 Bureau status was attained.

Essentially all lines of work originally undertaken have been continued and expanded, and from time to time new functions have devolved upon the Bureau. In 1900 game preservation was added, with the passage of the Lacey Act, and 3 years later the first of a steadily growing system of national wildlife refuges was placed under its jurisdiction. Wildlife conservational work has been extended through the Alaska game laws; the migratory bird law of 1913, to regulate hunting; its successor, the Migratory Bird Treaty Act of 1918; and its supplement of 1929, the Migratory Bird Conservation Act, authorizing the present system of migratory-bird refuges. The last two laws, including amendments, were enacted to carry out the provisions of a treaty negotiated with Great Britain in 1916 for the protection of birds that migrate between the United States and Canada, and a similar treaty with Mexico negotiated in 1937.

From 1915 to the present the Bureau not only has given increased attention to research, improved by application of modern methods of approach, but also has entered into the field of cooperative control of animal enemies of agriculture, stock raising, forestry, and wild game. Its leadership in cooperative control on an extensive scale began in 1916 and since that year its aid has been requested and encouraged by State and other agencies, the funds made available by cooperators having far exceeded the Federal appropriations for the purpose. This function is appropriately entrusted to an organization sympathetic with the needs of wildlife—the Bureau's program has never been one of extermination but rather one of local control.

In recent years, with the cooperation of States, land-grant colleges, and private organizations, the Survey has devoted increasing attention to wildlife-management problems. Studies are conducted on fur production, predator-prey relationships, mosquito-control drainage problems as they affect wildlife, salvaging of submarginal lands for wildlife use, wildlife-disease research, and related subjects. In studies of the relationships between forests and their fauna, made possible by the McSweeney-McNary Forestry Research Act of 1928, it has been found that many animal species exert a beneficial influence on the forest, that some are important products of forested areas, and that others require local control in varying degrees.

Because comparatively little was done in the last century to conserve wildlife, many species today are on the brink of extermination or dangerously approaching that point. To protect wildlife the Bureau not only must conduct research on diseases, migrations, food habits, and life histories, but it must also provide adequate areas on which the various forms of wildlife can live and breed in security. The Bureau maintains refuges for this purpose. The wildlife restoration program is essentially one of land utilization and requires long-range planning. When submarginal lands are acquired by the Government, and agriculture or some other use is not primary, the Biological Survey attempts to see that wildlife restoration is recognized as either the primary or a secondary, but still important, use. With the availability of emergency funds, beginning in 1933, the Bureau was able to purchase thousands of acres more for refuge purposes. The Survey was well prepared for the restoration program by a half century of research in all fields affecting wildlife.

To aid the States in the conservation of their wildlife, Congress in 1937 passed the Pittman-Robertson Act, which authorizes the appropriation of funds to be used on a cooperative basis to develop wildlife-restoration projects sponsored by the States. Supervision of this work was assigned to the Bureau.

In the 53 years of its history, the Biological Survey, under its several designations, has been directed by six chiefs: C. Hart Merriam (1885-1910), Henry W. Henshaw (1910-16), Edward W. Nelson (1916-27), Paul G. Redington (1927-34), Jay N. Darling (1934-35), and Ira N. Gabrielson (since 1935).

ORGANIZATION

The nine divisions constituting the Survey's present organization are essentially modifications of three under which the Bureau's functions were grouped at the beginning of the present

century: (1) Economic investigations, (2) geographic distribution, and (3) game preservation.

The first of these has developed into two divisions—Wildlife Research and Predator and Rodent Control. The second, with increased responsibilities in wildlife surveys, is continued in the Division of Wildlife Research. The third has evolved into five divisions—Land Acquisition, Wildlife Refuges, Game Management, Construction and C. C. C. Operations, and Federal Aid in Wildlife Restoration. Business and informational functions,

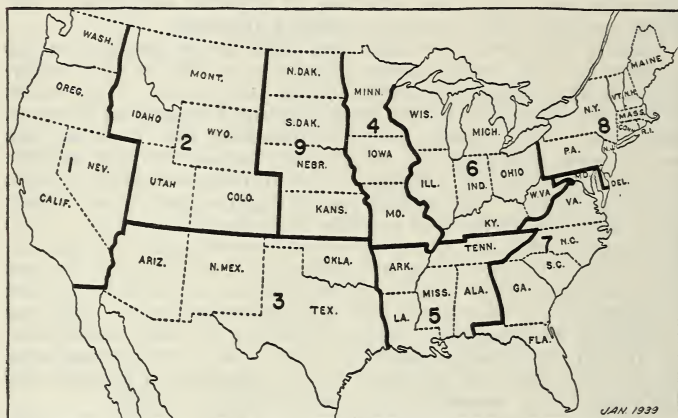


FIGURE 1.—Boundaries of the regions embracing field activities of the Bureau of Biological Survey (the Territory of Alaska is region No. 10).

expanded from work formerly handled in the Office of the Chief of Bureau, are now, respectively, the duties of the Division of Administration and the Division of Public Relations.

To coordinate better the field activities of the Bureau other than research functions, land-acquisition work, and regulation of importations of foreign forms of wildlife, the United States and Alaska have been divided into 10 regions (fig. 1) each supervised by a regional director, subject to instructions directly from the Chief of Bureau or the chiefs of Washington divisions and sections.

Details of the research, service, and regulatory activities of the Survey may be presented topically under the several divisions, as follows:

The Division of Wildlife Research continues the early work of the Biological Survey in the study of the migration and food habits of birds and in faunal geography, life histories, relationships, and the classification of birds and mammals and other land vertebrates. Its work falls naturally into five sections: (1) Wildlife surveys, (2) food-habits research, (3) bird distribution and migration studies, (4) fur-animal research, and (5) wildlife-disease investigations.

In cooperation with the United States Forest Service, the Division conducts studies in forest-wildlife relationships, dealing with animals as factors in forest management, with the aim of acquiring proper techniques that will benefit alike the forest and its wild-animal inhabitants. In cooperation with various State governments, land-grant colleges, and others, several of the Bureau's cooperative wildlife research units study wildlife problems typical of their regions. The life histories of deer, antelope, grouse, wild turkeys, and other resident game species are studied to provide a sound basis for management practices.

Because intelligent wildlife management demands a knowledge of the food requirements of the various species, the Division investigates the food habits of game and fur mammals, game birds, and song, insectivorous, and other nongame species in their relation to farming, horticulture, and forestry; and studies the availability, relative value, and propagation of recognized wildlife foods and makes constructive recommendations on these subjects to persons engaged in wildlife management.

Basic principles in refuge management are determined through experiments conducted on important refuges under the Survey's supervision. Field stations are maintained to study problems peculiar to certain localities; for example, research on damage by birds or wild animals to fruits, vegetables, livestock, farm crops, and other property. Related field investigations deal with the life histories and habits of important wildlife species or with research designed to protect species that are diminishing in numbers. The Division assists other Federal agencies interested in wildlife conservation by conducting varied laboratory and field investigations.

Bird surveys made by the Division include research on geographic distribution, migrations, and relative abundance of the nearly 800 species of birds in North America. Attention is

largely concentrated on migratory waterfowl and other game birds. Analytical studies are based upon important data obtained through a large corps of volunteer observers, the operation of more than 2,100 bird-banding stations, and seasonal observations and reports by Bureau biologists in the four principal migration flyways of the continent. The results of these investigations form the basis for regulatory action in enforcing the provisions of the Migratory Bird Treaty Act and are valuable in determining migration routes, nesting areas, and the abundance of various species of birds.

Fur-animal research is an increasingly important function of the Bureau. Information obtained by the Division's fur experts has been useful to trappers, fur farmers, fur tradesmen, and wildlife conservationists. Problems investigated include the production and utilization of fur animals, including rabbits for meat and fur; the breeding, feeding, and handling of fur animals in captivity, and metabolism and reproduction studies on such animals; and research in fur-fiber structures. Three fur-animal experiment stations are maintained to study fur-farming and fur-production problems.

Closely allied to all phases of wildlife management is the disease problem. The Division's staff conducts research on wildlife diseases and develops control measures to cope with losses from infectious, parasitic, and nutritional ailments. Studies are made of the diseases of game birds, game and fur mammals, and other forms of economic importance.

The Division of Federal Aid in Wildlife Restoration was established on July 1, 1938, to correlate and supervise all activities concerned with the Pittman-Robertson Federal Aid to Wildlife Restoration Act of 1937. This function was delegated to this Division by the Chief of the Bureau, who is entrusted by the Secretary of Agriculture with the administration of funds allotted as authorized by the act, which each year may approximate the revenue accruing from the Federal excise tax on arms and ammunition. This act provides the incentive and machinery for much closer cooperation with State game departments, which are encouraged to develop wildlife restoration projects and are reimbursed from Federal funds for costs incurred for work satisfactorily performed on approved projects in an amount not to exceed 75 percent of the costs. The remaining 25 percent is paid by the States.

State restoration projects include the selection, restoration, rehabilitation, and improvement of areas of land or water adapt-

able as feeding, resting, or breeding places for wildlife; the acquisition of such areas; the prosecution of improvement activities designed to develop selected units to insure the maximum in wildlife utility; and the conduct of research into the practical aspects of wildlife management. All phases of the program are supervised by the Division, including the apportionment of funds, the determination of eligibility of States to participate, the analysis of all projects submitted to see that they are approvable before being accepted, and the recommendation for payment for work satisfactorily performed on approved projects. While it is neither the responsibility nor the desire of the Department to select restoration projects, the Division is obliged to counsel and advise States as to what projects are acceptable, so that needless expense may not be incurred in projects that may not be finally approved.

The Division of Land Acquisition is concerned with the acquisition of areas of land and water suitable for national wildlife refuges. Refuge areas are procured by reservation of public domain by Executive order, by gift or easement, and by purchase through funds authorized by the Migratory Bird Conservation Act of 1929 and other acts of Congress and through allotments of emergency funds.

When areas recommended by the Division of Wildlife Refuges for addition to the refuge system have been found by the Division of Wildlife Research to be biologically suited, it is the function of the Division of Land Acquisition to determine through detailed examinations and appraisals the extent of the various types of land, the soil cover, nature of improvements, ownership, and market value. This Division then negotiates with the owners to reach equitable price agreements preliminary to purchase and prepares material incident to such proposed purchases for presentation to the Migratory Bird Conservation Commission for its consideration and approval. It also surveys acquired lands to determine the exact acreage and to establish and mark their boundaries; compiles maps to show the lands acquired and required for the administration of refuges.

This Division likewise makes similar examinations of areas being considered under the Pittman-Robertson Federal Aid to Wildlife Restoration Act of 1937, and, when of mutual benefit to the State concerned and to the Federal Government, cooperates with the State in conducting purchase negotiations with the owners of lands to be acquired.

The Division of Wildlife Refuges is charged with the general administration of the national wildlife refuges under the jurisdiction of the Survey, involving the selection, planning, development, maintenance, patrol, and public use of lands primarily suited for wildlife, and the evaluation of the results of the program.

Under the Division's supervision in July 1938 were 248 wildlife refuges. The major work of the Division is to plan and execute a balanced wildlife program for the establishment of refuges for migratory waterfowl, big game, and other forms of wildlife throughout the United States and its possessions; conduct and coordinate investigations to determine methods of improving the habitat for wildlife; determine the existing or potential waterfowl and big-game food resources; and gather data for developing water resources on the refuges. It also reviews general construction plans for the refuges, supervises the construction of water-control and other impoundment structures, and is responsible for the direction of land use and the execution of policies on haying, grazing, utilization of fur resources, sale of surplus products, recreation, fishing, and other permissible uses. The Division directs activities on established refuges to insure proper protection against fire and trespass and to provide for the maintenance of water-control structures, buildings, and other improvements.

This Division also cooperates extensively with other Federal agencies and State governments, educational institutions, sportsmen's organizations, conservation groups, and individuals, advising them on wildlife-management problems and, at their request, often directing and supervising their wildlife-conservation projects.

The acreage shown for refuges on subsequent pages is approximate in many cases, being changed from time to time by enlargements or other modifications of boundaries.

The Division of Construction and C. C. C. Operations, through the medium of the Civilian Conservation Corps, carries out general plans designed to develop certain of the wildlife refuges under the Bureau's supervision. Thus far the Corps has worked on about 40 of the more important refuges. With the aid of the manpower, facilities, and funds furnished by the C. C. C., the Survey has been able to improve these areas to a far greater extent than would have been possible under the regular funds available. The refuges are thus being developed to the maximum degree for attracting and supporting large concentrations of wildlife, and are being physically improved so as to lower the cost of future maintenance and facilitate administration.

In 1938 the work of 32 C. C. C. camps was under the supervision of the Division, which is responsible for the actual conduct of the work in all phases not specifically delegated to the War Department. All plans for construction work (except water-control structures), whether paid from regular or emergency funds, are reviewed by the Division before work begins.

The Division prepares specifications and cost estimates, appor-tions appropriations to individual projects, and keeps cost records on each approved activity; prepares detailed working drawings for all construction work; directs maintenance, repair, and equipment operations; and assists in enrollee safety work and in the instruction of educational classes in the C. C. C. camps.

The Division of Game Management is responsible for the administration of Federal statutes for the protection and conservation of wildlife, as follows: The Migratory Bird Treaty Act of 1918, as amended, protecting birds that migrate between the United States and Canada and the United States and Mexico, and regulating the movement of game mammals, and parts thereof, between the United States and Mexico; the Migratory Bird Conservation Act of 1929; the Migratory Bird Hunting Stamp Act of 1934; and the Lacey Act of 1900, as amended, regulating the shipment in interstate or foreign commerce of wild animals or birds and the importation of live birds and mam-mals from foreign countries; and, through the Alaska Game Com-mission, the Alaska Game Law of 1925.

It prepares drafts of regulations under these laws and directs the activities of United States game management agents, deputy United States game management agents, and United States deputy game wardens engaged in enforcement work, and recom-mends appropriate action in the prosecution of violators. The Division also cooperates extensively with State game depart-ments in the enforcement of laws for the protection of migratory birds and other protected species of wildlife. Importation in-spectors at various ports check consignments of foreign birds and mammals to prevent the introduction of harmful species. The Division issues permits (1) for the importation of foreign birds and mammals, (2) to handle migratory birds for scientific and propagating purposes, and (3) to destroy migratory birds that are found to be injurious to agriculture or other interests.

The Division also reviews and prepares in final form for sub-mission to the Secretary through the Solicitor amendments to the Alaska Game Law regulations as recommended by the Com-mission, and, in connection with the administration of this act,

coordinates the functions of the Bureau and the Commission. Alaska wildlife agents, under the direction of the Commission, enforce the regulations for the protection of wild animals and birds in the Territory.

The Division of Predator and Rodent Control conducts cooperative work throughout the United States and Alaska for the control of predatory animals and injurious rodents that interfere with agriculture, horticulture, forestry, stock raising, and game protection, and that serve to spread rabies, sylvatic plague, and other diseases of wild animals. The work is directly supervised by district agents and their cooperators in control districts that for the most part are bounded by State lines, in the interests of effective cooperation with officials and local agencies. The Bureau does not exterminate even preponderantly injurious animals, but does undertake to control them in areas where they jeopardize economic interests, valuable wildlife, and human welfare. The methods employed have measurably influenced the public attitude in this field and have aided in promoting a constructive wildlife policy under trained leaders, who in their operations have constantly in view the welfare of wildlife as a whole.

A control-methods research laboratory is maintained at Denver, Colo., where Survey specialists carry on studies to improve methods for suppressing injurious forms of wildlife and to perfect means for safeguarding valuable species during control operations. A cooperative supply depot and laboratory is maintained at Pocatello, Idaho, for compounding baits and distributing baits, traps, and other control-work supplies throughout the United States.

The Division of Administration is responsible for the handling of matters pertaining to business management and personnel administration, including budgetary and appropriation control, fiscal and accounting work, claims, purchases and property accountability, and mails and files.

The Division of Public Relations makes available to the public the results of the Biological Survey's wildlife research and the progress of the wildlife-restoration program and of experiments in the propagation of economically useful species, as well as features of conservation-law enforcement and of necessary control of injurious forms of wildlife. Publication work involves the editorial and critical review of all manuscripts prepared for

official, cooperative, and outside publication. In addition to contributions to the departmental series, the official publications include a Bureau technical serial, the North American Fauna, and a processed series of Wildlife Research and Management Leaflets to supplement correspondence. The current and visual information work is carried on through statements for the press, special articles, radio and other addresses, motion pictures, exhibits, photographs, film strips, and lantern slides.

ADMINISTRATIVE ORGANIZATION

IRA N. GABRIELSON, Chief.

W. C. HENDERSON, Associate Chief.

W. L. McATEE, principal biologist, technical adviser and research specialist.

Division of Wildlife Research:

Chief, W. B. BELL, principal biologist.

Assistant chief, _____.

Section of Wildlife Surveys.—H. H. T. JACKSON, senior biologist, in charge.

Section of Distribution and Migration of Birds.—F. C. LINCOLN, senior biologist, in charge.

Section of Food Habits.—CLARENCE COTTAM, senior biologist, in charge.

Section of Fur Resources.—FRANK G. ASHBROOK, principal biologist, in charge.

Section of Disease Control.—J. E. SHILLINGER, senior veterinarian, in charge.

Division of Federal Aid in Wildlife Restoration:

Chief, ALBERT M. DAY, principal biologist.

Assistant chief, ROBERT M. RUTHERFORD, senior acquisition and construction specialist.

Section of Land and Structures.—ROBERT M. RUTHERFORD, in charge.

Section of Apportionments and Statistics.—GUY W. LANE, junior administrative officer, in charge.

Section of Program Planning.—J. PAUL MILLER, biologist, in charge (acting).

Division of Land Acquisition:

Chief, RUDOLPH DIEFFENBACH, senior land valuation engineer.

Assistant chief, A. A. RIEMER, land valuation engineer (acting).

Section of Surveys and Maps.—A. A. RIEMER, in charge.

Section of Appraisals and Negotiations.—_____.

Division of Wildlife Refuges:

Chief, J. C. SALYER, II.

Assistant chief, A. C. ELMER.

Section of Land Management.—FRANK L. EARNSHAW, in charge.

Section of Operations.—J. N. BALL, in charge.

Section of Habitat Improvement.—W. F. KUBICHEK, in charge.

Section of Structures.—WILLIAM V. TAYLOR, in charge.

Section of E. R. A.—HAROLD J. REGAN, in charge (acting).

Division of Construction and C. C. C. Operations:

Chief, H. W. TERHUNE, senior administrative officer.

Assistant chief, P. S. M. PEDERSEN, construction engineer.

Section of Project Records and Fiscal Control.—LEE F. ROBINSON, senior clerk, in charge.

Section of Equipment, Safety, and Education.—R. O. GUSTAFSON, administrative assistant, in charge.

Section of Working Drawings and Details.—C. EDGAR COPE, associate architect, in charge.

Division of Game Management:

Chief, W. E. CROUCH, principal administrative officer.

Assistant chief, CHESTER A. LEICHHARDT, senior administrative officer.

Section of Game Agents.—CHESTER A. LEICHHARDT, in charge.

Section of Law Enforcement.—F. P. CALLAGHAN, game conservation officer, in charge.

Section of Importations and Permits.—R. W. WILLIAMS, senior biologist, in charge.

Unit of Alaska Game Law Administration.—GEO. A. HOSSICK, administrative assistant, in charge.

Division of Predator and Rodent Control:

Chief, DORR D. GREEN, principal biologist.

Assistant chief, _____, senior biologist.

Division of Administration:

Chief, W. R. DILLON, principal administrative officer.

Assistant chief, THOS. E. JACOBY, junior administrative officer.

Assistant chief, S. C. MOORE, junior administrative officer.

Section of Personnel and Pay Rolls.—E. J. THOMPSON, administrative assistant, in charge.

Section of Accounting.—CAREY G. CRUIKSHANK, senior administrative assistant, in charge.

Section of Purchase and Property.—J. L. TALBERT, junior administrative assistant, in charge.

Section of Mails and Files.—W. D. HOBBS, senior clerk, in charge.

Division of Public Relations:

Chief, H. P. SHELDON.

Assistant chief, WM. H. CHEESMAN, biological editor.

Editorial Section.—WM. H. CHEESMAN, in charge.

Section of Current and Visual Information.—HOWARD ZAHN-
ISER, biological writer, in charge.

REGIONAL ORGANIZATION

Regional Directors:

Region 1 (Pacific), THOMAS B. MURRAY (acting), Portland, Oreg.

Region 2 (Mountain), LEO L. LAYTHE, Denver, Colo.

Region 3 (Southwestern), DONALD A. GILCHRIST, Albuquerque, N. Mex. (Succeeded by JOHN C. GATLIN (acting), effective May 8, 1939.)

Region 4 (West Central), GEORGE TONKIN, Des Moines, Iowa.

Region 5 (Southern), ROY MOORE, New Orleans, La.

Region 6 (East Central), DANIEL H. JANZEN, Milwaukee, Wis.

Region 7 (Southeastern), JAMES SILVER, Atlanta, Ga.

Region 8 (Northeastern), S. BARRY LOCKE, Boston, Mass.

Region 9 (Plains), BURNIE MAUREK, Omaha, Nebr.

Region 10 (Alaska), FRANK DUFRESNE, Juneau, Alaska.



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Map of the United States showing the distribution of [illegible]

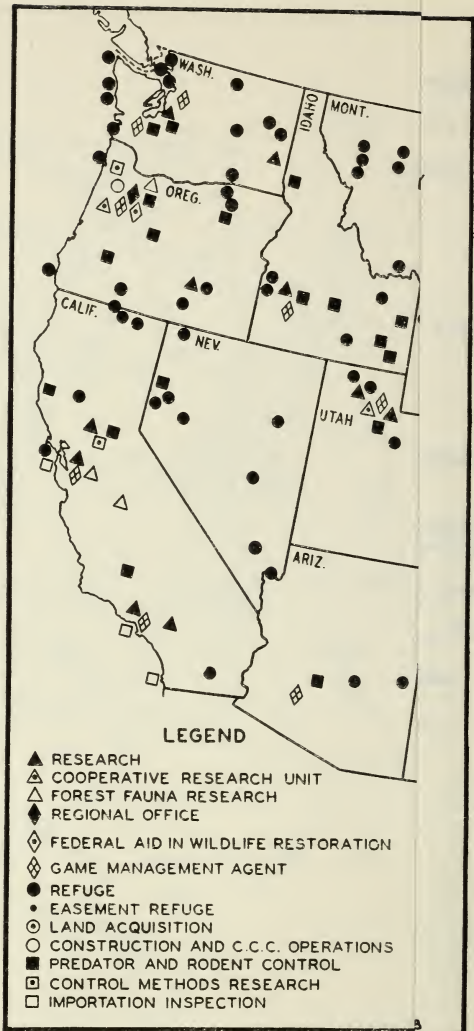


FIGURE 2.—I

FIELD ACTIVITIES

The distribution and types of field activities of the Biological Survey, here listed alphabetically by States and localities, are shown on the maps (figs. 2 and 3) facing page 15 and on page 16.

ALABAMA

Construction and C. C. C. operations.—(See New Orleans, La.)

Federal aid in wildlife restoration.—(See New Orleans, La.)

Food habits research.—(See Pilot Town, La.)

Forest fauna research.—(See Gulfport, Miss.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Charleston, S. C.)

National wildlife-refuge supervision.—(See New Orleans, La.)

Native game-bird research.—(See Charleston, S. C.)

Regional office.—(See New Orleans, La.)

Rodent control.—(See State College, Miss.)

Auburn

Cooperative wildlife research unit.—Care of Alabama Polytechnic Institute. ALLEN M. PEARSON, associate biologist, in charge.

Conducts research on wildlife management problems. In Alabama, Florida, Georgia, Mississippi, South Carolina, and Tennessee.

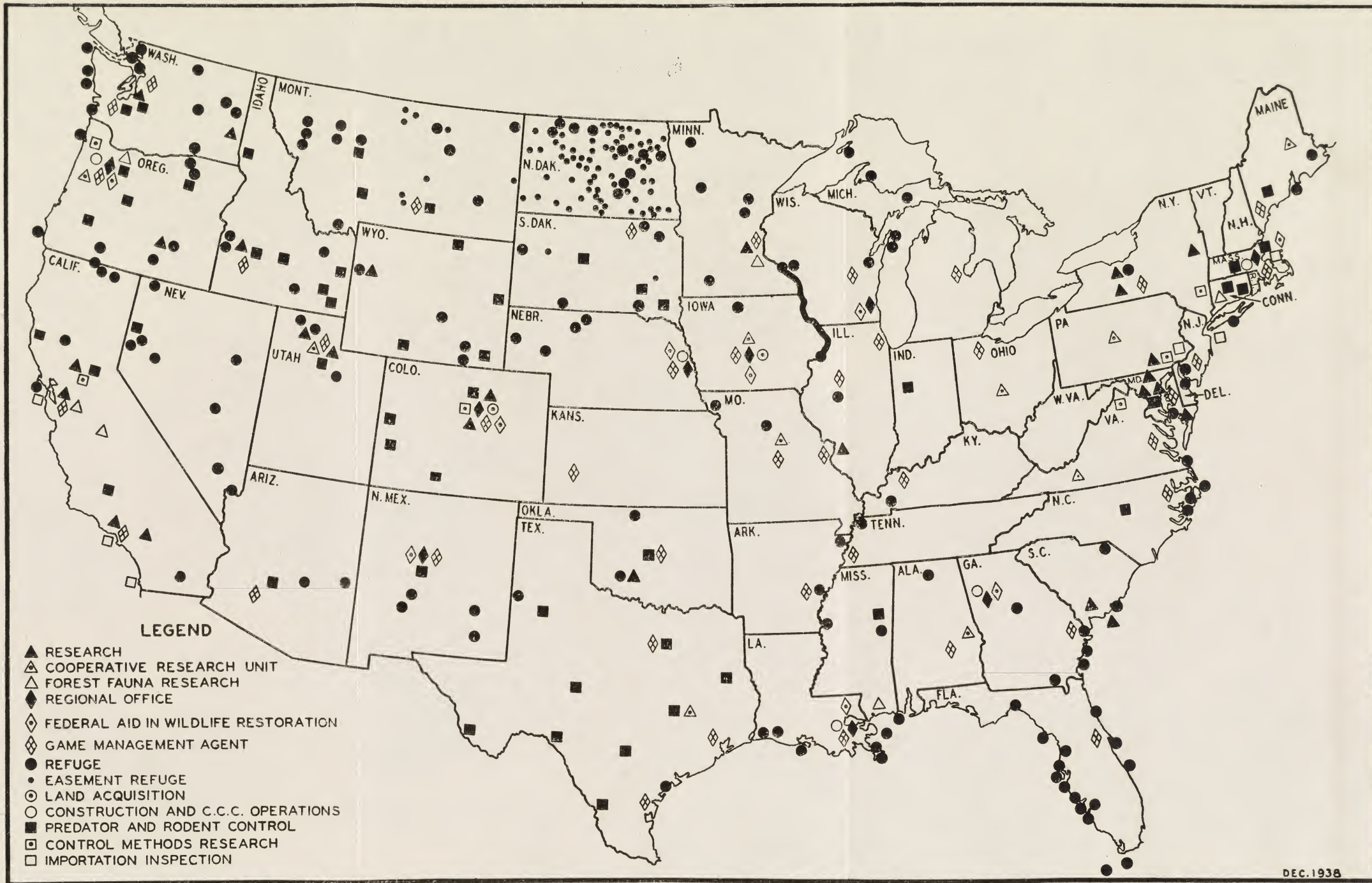
In cooperation with the Alabama Polytechnic Institute; Alabama Department of Conservation of Game, Fish and Seafoods; and the American Wildlife Institute.

Decatur

Wheeler Migratory Waterfowl Refuge.—CHESTER R. MARKLEY, assistant refuge manager, in charge.

Established by Executive order of July 7, 1938, to protect migratory waterfowl and other wildlife. In Limestone, Madison, and Morgan Counties, on the Wheeler Reservoir. Acreage, approximately 41,800.

In cooperation with the Tennessee Valley Authority.



DEC. 1938

FIGURE 2.—Distribution and types of field activities of the Biological Survey in the United States.

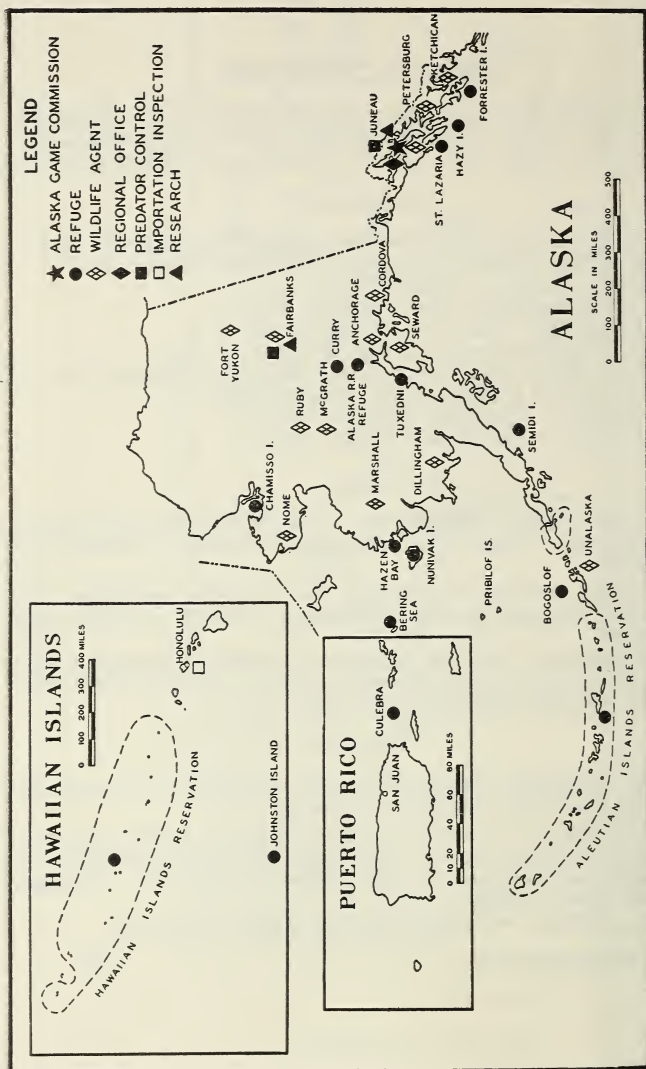


Figure 3.—Distribution and types of field activities of the Biological Survey in Alaska, Hawaii, and Puerto Rico.

Mobile

Petit Bois Island Bird Refuge.—ROY MOORE, regional director (see New Orleans, La.), in charge.

Established by Executive order of May 6, 1913, to protect laughing gulls, least terns, black skimmers, brown pelicans, and Louisiana herons. In Mobile County, Ala., and Jackson County, Miss. West of the entrance to Mobile Bay, 10 miles south of the mainland. Acreage, 960.

Montgomery

Game protection.—Room 332, Post Office Building. P. O. Box 191. EUGENE M. BORING, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Alabama and in eastern and southern Mississippi.

ALASKA

Migratory birds research.—(See Berkeley, Calif.)

Anchorage

Alaska game law enforcement.—CHARLES J. O'CONNOR, wildlife agent, in charge. In district No. 9.

Predator control.—FRANK GLASER, agent, in charge.

Demonstrations are given local trappers in more effective methods of capturing wolves and coyotes that prey upon native mammals and birds.

In cooperation with the Territorial government.

Cordova

Alaska game law enforcement.—CLARENCE J. RHODE, wildlife agent, in charge. In district No. 4.

Dillingham

Alaska game law enforcement.—CARLOS M. CARSON, wildlife agent, in charge. In district No. 8.

Fairbanks

Alaska game law enforcement.—SAM O. WHITE, wildlife agent, in charge. In district No. 11.

Wildlife research in Alaska.—JACK W. WARWICK, field assistant, in charge.

Fort Yukon

Alaska game law enforcement.—PETER C. McMULLEN, wildlife agent, in charge. In district No. 10.

Juneau

Alaska Game Commission.—P. O. Box 2021.

Authorized by the Alaska Game Law, approved January 13, 1925, as amended, to protect game, land fur-bearing animals, and birds of the Territory.

The members of the Commission (appointed by the Secretary of Agriculture, one from each of the four judicial divisions, and the fifth the chief representative in the Territory of the Bureau of Biological Survey, with headquarters in the Federal Building) are as follows:

EARL N. OHMER, Petersburg, chairman, member from first judicial division.

FRANK P. WILLIAMS, St. Michael, member from second judicial division.

ANDREW A. SIMONS, Lakeview, via Seward, member from third judicial division.

JOHN HAJDUKOVICH, Tetlin, member from fourth judicial division.

FRANK DUFRESNE, executive officer, fiscal agent, and secretary.

Regional office.—P. O. Box 2021. FRANK DUFRESNE, regional director, in charge. HOMER W. JEWELL, assistant executive officer.

General supervision of all field activities of the Biological Survey (fig. 2), except those pertaining to research, land acquisition, and importations of birds and mammals; subject to instructions directly from Chief of Bureau or the chiefs of Washington divisions and sections. In region No. 10 (Territory of Alaska).

Alaska game law enforcement.—————, wildlife agent, in charge. In district No. 1.

Predator control.—P. O. Box 2021. FRANK DUFRESNE, regional director, in charge.

Demonstrations are given local trappers in more effective methods of capturing wolves and coyotes that prey upon native mammals and birds.

In cooperation with the Territorial government.

Wildlife research in Alaska.—Care of Alaska Game Commission, LAWRENCE J. PALMER, principal biologist, in charge.

Investigations of the life history, habits, and management of Territorial wildlife. Includes food resources, breeding and feeding habits, relation of wildlife to forestry, and other biological investigations.

*Alaska Railway Fur Refuge.*¹

Established by Executive order of February 21, 1927, to protect muskrats and beavers. Includes eight small areas along the right of way of the Alaska Railroad. Acreage, 4,160.

Aleutian Islands Wildlife Refuge.—H. DOUGLAS GRAY, refuge manager, in charge.

Established by Executive order of March 3, 1913, to protect native birds and game animals, for the propagation of reindeer and fur-bearing animals, and (under the Bureau of Fisheries) for the development of fisheries and protection of marine mammals. With vegetation characteristic of the treeless Arctic plains, embraces the islands of the Aleutian chain, extending about 1,200 miles westward from the Alaska peninsula, except Akun, Akutan, Sanak, Tigalda, Umnak, Unalaska, and a portion of Amaknak Island. By Executive order of April 7, 1930, Amak Island, the Sealion Rocks, and a small unnamed island lying southwest of Amak Island were added to the refuge. Acreage, approximately 2,898,590.

In cooperation with the Bureau of Fisheries, Department of Commerce.

*Bering Sea Bird Refuge.*¹

Established by Executive order of February 27, 1909, to protect sea birds. On this refuge is the only known breeding ground of the rare and beautiful McKay's snowflake. Many Arctic foxes and Pribilof sandpipers also are found here. In the Bering Sea; embraces St. Matthew and Hall Islands and Pinnacle Islet, 220 miles north of the Pribilofs. Acreage, 39,058.

¹ Administered by FRANK DUFRESNE, regional director, P. O. Box 2021, Juneau.

*Bogoslof Bird Refuge.*¹

Established by Executive order of March 2, 1909, to protect puffins, auklets, murres, gulls, sea lions, and other wildlife. In the Bering Sea; embraces a group of volcanic islets, known as Bogoslof Islands of the Aleutian archipelago, about 40 miles north of Umnak and Unalaska. Acreage, 1,200.

*Chamisso Island Bird Refuge.*¹

Established by Executive order of December 7, 1912, to protect horned puffins, Pallas' murres, Pacific kittiwakes, Point Barrow gulls, and other Arctic birds along the northwest coast of Alaska. Two miles south of the extremity of Choris Peninsula; a reservation $1\frac{1}{4}$ miles long and $\frac{1}{2}$ mile wide; includes Chamisso Island, and Puffin and other nearby rocky islets in Kotzebue Sound. Acreage, 588.

*Curry Bird, Game, and Fish Refuge.*¹

Established by Executive order of February 21, 1927, to protect grouse, ptarmigans, black bears, foxes, lynxes, and ermines. Administered as a bird, fish, and game refuge; fishing regulated by the Department of Commerce. At Curry; surrounds the Government hotel. Acreage, 8,960.

In cooperation with the Department of Commerce.

*Forrester Island Bird Refuge.*¹

Established by Executive order of January 11, 1912, to protect puffins, auklets, murres, guillemots, and other sea birds. In the Pacific Ocean, west of Ketchikan, at the extreme southwestern boundary of Alaska; embraces Forrester and Lowrie Islands, and Wolf and other adjacent rocks. Within the boundaries of the Tongass National Forest. Acreage, 3,400.

In cooperation with the United States Forest Service.

*Hazen Bay Migratory Waterfowl Refuge.*¹

Established by Executive order of December 14, 1937, to protect white-fronted, emperor, and little Canadian or cackling geese; swans; glaucous gulls; greater scaup ducks; old squaws; and eider ducks. In Hazen Bay, north of Nelson Island, near the north entrance of Baird Inlet, off the west coast of Alaska. Acreage, 6,800.

*Hazy Island Bird Refuge.*¹

Established by Executive order of January 11, 1912, to protect sea birds. West of Coronation Island and 100 miles north of

¹ See footnote, 1, p. 19.

Forrester Island; embraces a group of islands in southeastern Alaska. Within the boundaries of the Tongass National Forest. Acreage, 100.

In cooperation with the United States Forest Service.

*Nunivak Island Wildlife Refuge.*¹

Established by Executive order of April 15, 1929, for use in conducting experiments in crossing and propagation of reindeer and native caribou, and to protect native birds, wild and fur-bearing animals. A herd of musk oxen is also maintained here. In Bering Sea, off the west coast of Alaska. By Executive order of October 22, 1930, Triangle Island and all small unnamed islands and rocks lying adjacent to Nunivak Island were added. Acreage, 1,111,000.

*St. Lazaria Bird Refuge.*¹

Established by Executive order of February 27, 1909, to protect puffins, auklets, murre, guillemots, gulls, petrels, and cormorants. At the west entrance to Sitka Sound, 30 miles west of Sitka. Acreage, 69.

*Semidi Islands Wildlife Refuge.*¹

Established by Executive order of June 17, 1932, to protect puffins, auklets, petrels, and other birds. In the North Pacific Ocean, southeast of the Alaska Peninsula; embraces Aghiyuk, Chowiet, Kateekuk, Anowik, Kiliktagik, Suklik, Aghik, Aliksemit, and South Islands, known as the Semidi Island group. Acreage, 8,920.

*Tuxedni Bird Refuge.*¹

Established by Executive order of February 27, 1909, to protect Pacific kittiwakes, glaucous-winged gulls, and eider ducks. Within Southwestern Fisheries Reservation; embraces Chisik, Egg, and other small islands in Tuxedni harbor, Cook Inlet. Acreage, 6,569.

Ketchikan

Alaska game law enforcement.—GARELD B. BANTA, wildlife agent, in charge. In district No. 3.

McGrath

Alaska game law enforcement.—NORMAN J. BENSON, wildlife agent, in charge. In district No. 7.

¹ See footnote 1, page 19.

Marshall

Alaska game law enforcement.———, wildlife agent, in charge. In district No. 14.

Nome

Alaska game law enforcement.—GRENOLD COLLINS, wildlife agent, in charge. In district No. 13.

Petersburg

Alaska game law enforcement.—HOSEA SARBER, wildlife agent, in charge. In district No. 2.

Ruby

Alaska game law enforcement.———, wildlife agent, in charge. In district No. 12.

Seward

Alaska game law enforcement.—HAROLD W. GALLWAS, wildlife agent, in charge. In district No. 5.

Unalaska (Kodiak)

Alaska game law enforcement.———, wildlife agent, in charge. In district No. 6.

ARIZONA

Boulder Canyon Wildlife Refuge.—(See Las Vegas, Nev.)

Construction and C. C. C. operations.—(See New Orleans, La.)

Cooperative wildlife research unit.—(See Logan, Utah.)

Disease control research.—(See Los Angeles, Calif., and Brigham, Utah.)

Federal aid in wildlife restoration.—(See Albuquerque, N. Mex.)

Food habits research.—(See Burns, Oreg., Sacramento, Calif., Denver, Colo., and Brigham, Utah.)

Forest fauna research.—(See Berkeley, Calif.)

Game management surveys.—(See Boise, Idaho; Cache, Okla.; and Jackson, Wyo.)

Land acquisition.—(See Denver, Colo.)

Migratory birds research.—(See Berkeley, Calif., and Denver, Colo.)

National wildlife-refuge supervision.—(See Albuquerque, N. Mex.)
Regional office.—(See Albuquerque, N. Mex.)

Phoenix

Game protection.—201 New Post Office Building. THOMAS R. LAWHORN, United States game management agent, in charge.

Enforcement of the Migratory Bird Hunting Stamp Act, Migratory Bird Treaty Act, and Lacey Act. In Arizona.

Predator and rodent control.—201 New Post Office Building. EVERETT M. MERCER, district agent, in charge.

State-wide activities in the control of (1) wolves, coyotes, mountain lions, and other animals killing stock and game, and (2) pocket gophers, prairie dogs, and other injurious rodents.

In cooperation with the extension service, University of Arizona, and the State Livestock Sanitary Board.

Roosevelt

Salt River Bird Refuge.—DONALD A. GILCHRIST, regional director (see Albuquerque, N. Mex.), in charge.

Established by Executive order of February 25, 1909, to protect waterfowl and other birds. In Gila County, at Roosevelt Lake on the Salt River reclamation project, 80 miles east of Phoenix. Acreage, 21,120.

In cooperation with the Bureau of Reclamation, Department of the Interior.

St. Johns

Apache Migratory Waterfowl Refuge.—DONALD A. GILCHRIST, regional director (see Albuquerque, N. Mex.), in charge.

Established by Executive order of July 27, 1937, to protect migratory birds and other wildlife. In Apache County, in the Apache National Forest. Acreage, 2,680.

In cooperation with the United States Forest Service.

Yuma

Cabeza Prieta Game Range.—201 New Post Office Building, Phoenix. MALCOLM N. ALLISON, assistant biologist, in charge (acting).

Established by Executive order of January 25, 1939, to protect Gaillard bighorn sheep, antelopes, mule deer, peccaries,

Gambel quails; and other wildlife. In Yuma and Pima Counties. Acreage, 866,880.

In cooperation with the Grazing Division, Department of the Interior.

Kofa Game Range.—201 New Post Office Building, Phoenix. MALCOLM N. ALLISON, assistant biologist, in charge (acting).

Established by Executive order of January 25, 1939, to protect Gaillard bighorn sheep, antelopes, mule deer, peccaries, Gambel quails, and other wildlife. In Yuma County. Acreage 661,120.

In cooperation with the Grazing Division, Department of the Interior.

ARKANSAS

Construction and C. C. C. operations.—(See New Orleans, La.)

Cooperative wildlife research unit.—(See Columbia, Mo., and College Station, Tex.)

Disease control research.—(See Brigham, Utah.)

Federal aid in wildlife restoration.—(See New Orleans, La.)

Food habits research.—(See Pilot Town, La., Burns, Oreg., Denver, Colo., and Brigham, Utah.)

Forest fauna research.—(See Gulfport, Miss.)

Game management surveys.—(See Boise, Idaho; Cache, Okla.; and Jackson, Wyo.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Denver, Colo., and Edwardsville, Ill.)

National wildlife-refuge supervision.—(See New Orleans, La.)

Predatory-animal control.—(See Oklahoma City, Okla.)

Regional office.—(See New Orleans, La.)

Rodent control.—(See State College, Miss.)

Little Rock

Game protection.—411 Federal Building, P. O. Box 144. WALTER B. MEBANE, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Arkansas.

Manila

Big Lake Migratory Bird Refuge.—P. O. ,Box 157. OLIN H. CASH, Junior refuge manager, in charge.

Established by Executive order of August 2, 1915, to protect ducks, little blue herons, American egrets, double-crested cormorants, white pelicans, wood ibises, and geese. In Mississippi County, in the northeastern corner of the State, 10 miles west of Blytheville. Acreage, 9,821.

St. Charles

White River Migratory Waterfowl Refuge.—HOWARD A. MILLER, in charge (acting).

Established by Executive order of September 4, 1935, to protect ducks, geese, snowy egrets, coots, great blue herons, wild turkeys, deer, and bears. In Phillips, Desha, Monroe, and Arkansas Counties, on the White River. Acreage, 103,192.

CALIFORNIA

Construction and C. C. C. operations.—(See Portland, Oreg.)

Cooperative wildlife research unit.—(See Corvallis, Oreg.; Logan, Utah.)

Disease control research.—(See Los Angeles, Calif., Pullman, Wash., and Brigham, Utah.)

Federal aid in wildlife restoration.—(See Portland, Oreg.)

Food habits research.—(See Los Angeles, Calif.; Burns, Oreg.; Denver, Colo.; and Brigham, Utah.)

Game management surveys.—(See Boise, Idaho; Cache, Okla.; Seattle, Wash.; and Jackson, Wyo.)

Land acquisition.—(See Denver, Colo.)

Lower Klamath Migratory Waterfowl Refuge.—(See Klamath Falls, Oreg.)

Regional office.—(See Portland, Oreg.)

Alturas

Clear Lake Bird Refuge.—P. O. Box 50, Merrill, Oreg. CLINTON G. FAIRCHILD, assistant refuge manager, in charge.

Established by Executive order of April 11, 1911, to protect ducks, geese, gulls, cormorants, herons, and white pelicans. In Modoc County, on the Klamath reclamation project, about 40 miles northwest of Alturas. Acreage, 25,300.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Berkeley

Forest fauna research.—332 Giannini Hall, University of California. E. E. HORN, biologist, in charge.

Research on the life history and habits of birds and mammals as related to grazing lands, forests, and forest reproduction. In California, Arizona, Nevada, New Mexico, and Utah.

In cooperation with the United States Forest Service, State Department of Agriculture, and the University of California.

Game protection.—211 Post Office Building. HUGH M. WORCESTER, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In northern California and northern Nevada.

Migratory birds research.—P. O. Box 399. LUTHER J. GOLDMAN, associate biologist, in charge.

Investigations of abundance, movements, and factors affecting migratory waterfowl and other birds on the Pacific Flyway. In California, Alaska, Arizona, Idaho, Montana, Nevada, Oregon, Utah, Washington, Canada, and Mexico.

In cooperation with State and Provincial game departments of the United States, Mexico, and Canada, and with cooperating observers.

Calipatria

Salton Sea Wildlife Refuge.—LUTHER C. GOLDMAN, junior refuge manager, in charge.

Established by Executive order of November 25, 1930, to protect pelicans, ducks, coots, herons, and shore birds. In Imperial County; includes part of the Salton Sea. Acreage 45,560.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Fontana

United States Rabbit Experiment Station.—GEORGE S. TEMPLETON, biologist, in charge.

Conducts breeding, feeding, and management investigations in rabbit production. In California, Nevada, Oregon, and Washington.

Los Angeles

Disease control research.—203 Administration Building, Union Stock Yards. EDWARD L. VAIL, assistant veterinarian, in charge.

Laboratory and field investigations of diseases of fur bearers; study of the etiology of and methods of preventing and curing these diseases. In California, Arizona, Colorado, Idaho, Nevada, Oregon, and Utah.

In cooperation with the Los Angeles County Live Stock Department.

Game protection.—1503 Federal Building. ALVIN W. ELDER, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In southern California and southern Nevada.

Inspection of importations.—3634 Hughes Avenue, Palm Station. ROBERT G. HANNUM, inspector of foreign birds and mammals, in charge.

Inspection at the port of Los Angeles of importations of foreign birds and wild animals to prevent the introduction of harmful species.

O'Neals

Forest fauna research.—Care of San Joaquin Experimental Range. HENRY S. FITCH, agent, in charge.

Research on the life history and habits of birds and mammals as related to range production and grazing and to factors affecting game on the range.

In cooperation with the United States Forest Service, State Department of Agriculture, and the University of California.

Sacramento

Control methods research.—271 Federal Building. JOSEPH KEYES, district investigator, in charge.

Research and field tests of poisoning and trapping methods for the control of injurious rodents and predatory animals.

Food habits research.—277 Federal Building. P. O. Box 1317. JOHNSON A. NEFF, assistant biologist, in charge.

Investigations of bird depredations in relation to fruit growing and other agricultural interests, and methods of control. In California, Arizona, Nevada, Oregon, and Washington.

Predator and rodent control.—271 Federal Building. CHARLES G. POOLE, district agent, in charge.

State-wide activities in the control of (1) coyotes and other animals killing stock and game and (2) ground squirrels and other injurious rodents.

In cooperation with the State Department of Agriculture.

San Diego

Inspection of importations.—Care of Natural History Museum, Balboa Park. LAURENCE M. HUEY, inspector of foreign birds and mammals, in charge.

Inspection at the port of San Diego of foreign birds and wild animals to prevent the introduction of harmful species.

San Francisco

Farallon Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of February 27, 1909, to protect puffins, auklets, guillemots, murrees, gulls, and cormorants. In Marin County, 30 miles west of the Golden Gate; embraces Middle and North Farallon Islands and adjacent rocks. Acreage 91.

Inspection of importations.—Great Highway and Sloat Boulevard. EDMUND HELLER, inspector of foreign birds and mammals, in charge.

Inspection at the port of San Francisco of foreign birds and wild animals to prevent the introduction of harmful species.

Inspection of importations.—Care of J. R. Slevin, California Academy of Sciences, Golden Gate Park. Mrs. MARY E. TERRY, inspector of foreign birds and mammals, in charge.

Inspection at the port of San Francisco of foreign birds and wild animals to prevent the introduction of harmful species.

Tulelake

Tule Lake Wildlife Refuge.—P. O. Box 50, Merrill, Oreg. CLINTON G. FAIRCHILD, assistant refuge manager, in charge.

Established by Executive order of November 3, 1932, to protect ducks, geese, and shore birds. In northeastern Siskiyou

County, within the Klamath reclamation project. Acreage, 36,563.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Ukiah

Predator and rodent control.—P. O. Box 514. WILLIAM F. POLSON, junior district agent, in charge.

Willows

Sacramento Migratory Waterfowl Refuge.—PETER J. VAN HUIZEN, junior refuge manager, in charge.

Established by Executive order of February 27, 1937, to protect ducks, geese, and shore birds. In Glenn and Colusa Counties; embraces the Old Spaulding Ranch. Acreage, 10,776.

COLORADO

Construction and C. C. C. operations.—(See Portland, Oreg.)

Cooperative wildlife research unit.—(See Logan, Utah.)

Disease control research.—(See Los Angeles, Calif., and Brigham, Utah.)

Food habits research.—(See Denver, Colo.; Burns, Oreg.; and Brigham, Utah.)

Game management surveys.—(See Boise, Idaho; Cache, Okla.; and Jackson, Wyo.)

Denver

Control methods research laboratory.—546 Customhouse. F. E. GARLOUGH, biologist, in charge.

Development of and experimentation in new and effective means for use in the control of injurious rodents and predatory animals; experiments in more effective and economical methods of poisoning and trapping animal pests; and the preparation of special poisons used in control operations.

Federal aid in wildlife restoration.—576 Customhouse. ———, regional inspector, in charge.

General supervision in all matters pertaining to the Federal Aid to Wildlife Restoration Act, subject to instructions from the regional director. In region 2, comprising Colorado, Idaho, Montana, Utah, and Wyoming.

Food habits research laboratory.—562 Customhouse. E. R. KALMBACH, senior biologist, in charge.

Investigations of the food habits of predatory mammals and destructive birds, and demonstrations and experiments in the control of birds. In Minnesota, Wisconsin, and all States west of the Mississippi River.

Game protection.—542 Customhouse. FRANK F. POLEY, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Colorado.

Land acquisition.—548 Customhouse. DOREN E. WOODWARD, associate land valuation engineer, in charge.

Examinations, appraisals, negotiations, and surveys for the acquisition of lands for refuge purposes. In western area, comprising Colorado, Arizona, California, Idaho, Montana, Nevada, New Mexico, Oklahoma, Oregon, Texas, Utah, Washington, and Wyoming.

Migratory birds research.—542 Customhouse. GEORGE B. SAUNDERS, associate biologist, in charge.

Investigations of the abundance, movements, and factors affecting migratory waterfowl and other birds on the Central Flyway. In Colorado, Arizona, Arkansas, Idaho, Iowa, Kansas, Louisiana, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, Wyoming, Canada, and Mexico.

In cooperation with State and Provincial game departments of the United States, Mexico, and Canada, and with cooperating observers.

National wildlife-refuge supervision.—576 Customhouse. CAREY H. BENNETT, associate refuge manager, in charge.

General supervision of refuge development and maintenance in region No. 2, comprising Colorado, Idaho, Montana, Utah, and Wyoming.

Predator and rodent control.—560 Customhouse. W. E. RITER, district agent, in charge.

State-wide activities in the control of (1) wolves, coyotes, mountain lions, and other animals killing stock and game, and (2) prairie dogs, ground squirrels, and other injurious rodents.

In cooperation with the extension service, State Agricultural College; and the State Board of Stock Inspection Commissioners.

Regional office.—576 Customhouse. LEO L. LAYTHE, regional director, in charge.

General supervision of all field activities of the Biological Survey, except those pertaining to research, land acquisition, and importations of birds and mammals; subject to instructions directly from the Chief of Bureau and the chiefs of Washington divisions and sections. In region No. 2 (Mountain), comprising Colorado, Idaho, Montana, Utah, and Wyoming.

Grand Junction

Predator and rodent control.—P. O. Box 328. R. P. McFARLAND, junior district agent, in charge.

Monte Vista

Predator and rodent control.—J. W. CROOK, junior district agent in charge.

Montrose

Predator and rodent control.—BENJAMIN R. CRANDALL, junior district agent, in charge.

CONNECTICUT

Construction and C. C. C. operations.—(See Boston, Mass.)

Cooperative wildlife research unit.—(See Orono, Maine.)

Federal aid in wildlife restoration.—(See Boston, Mass.)

Fur-animal research.—(See Saratoga Springs and Ithaca, N. Y.)

Game protection.—(See South Weymouth, Mass.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

Regional office.—(See Boston, Mass.)

Rodent control.—(See Boston, Mass.)

New Haven

Forest fauna research.—335 Prospect Street, Northeastern Forest Experiment Station. JOHN PEARCE, assistant biologist, in charge.

Research on the life history and habits of birds and mammals as related to forests and forest reproduction. In New York and the New England States.

In cooperation with the United States Forest Service.

Rodent control.—123 Huntington Street. ROBERT ISAAC, agent, in charge.

State-wide activities in the control of field mice, deer, and injurious rodents. In Connecticut and Rhode Island.

In cooperation with the Connecticut State College and Connecticut Pomological Society.

DELAWARE

Construction and C. C. C. operations.—(See Boston, Mass.)

Cooperative wildlife research unit.—(See State College, Pa.)

Disease control research.—(See Bowie, Md.)

Federal aid in wildlife restoration.—(See Boston, Mass.)

Food habits research.—(See Bowie, Md.)

Fur-animal research.—(See Swarthmore, Pa., Cambridge, Md., Ithaca, N. Y., and Saratoga Springs, N. Y.)

Game management surveys.—(See Bowie, Md.)

Game protection.—(See Pleasantville, N. J.)

Killcohook Migratory Bird Refuge.—(See Salem, N. J.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

Regional office.—(See Boston, Mass.)

Rodent control.—(See New Brunswick, N. J., and Boston, Mass.)

Smyrna

Bombay Hook Migratory Waterfowl Refuge.—E. North Street. JOHN F. HERHOLDT, junior refuge manager, in charge.

Established by Executive order of June 22, 1937, to protect black ducks, pintails, wood ducks, and blue- and green-winged teals. In Kent County. Acreage, 12,006.

DISTRICT OF COLUMBIA

Game protection.—(See Tappahannock, Va.)

Migratory birds research.—(See Charleston, S. C.)

Regional office.—(See Atlanta, Ga.)

Washington

Land acquisition.—Biological Survey, South Building. ———, in charge.

Examinations, appraisals, negotiations, and surveys for the acquisition of lands for refuge purposes. In the eastern area,

comprising Connecticut, Delaware, District of Columbia, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, and Virginia.

Rodent control.—Biological Survey, South Building. FRANK N. JARVIS, senior biological aide, in charge.

Control of rats and other injurious rodents. In the District of Columbia, Maryland, Virginia, and West Virginia.

FLORIDA

Construction and C. C. C. operations.—(See Atlanta, Ga.)

Cooperative wildlife research unit.—(See Auburn, Ala.)

Federal aid in wildlife restoration.—(See Atlanta, Ga.)

Food habits research.—(See Pilot Town, La.)

Forest fauna research.—(See Gulfport, Miss.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

National wildlife-refuge supervision.—(See Atlanta, Ga.)

Native game-bird research.—(See Charleston, S. C.)

Predator and rodent control.—(See Raleigh, N. C.)

Regional office.—(See Atlanta, Ga.)

Boca Grande

Island Bay Bird Refuge.—JAMES SILVER, regional director (see Atlanta, Ga.), in charge.

Established by Executive order of October 23, 1908, to protect brown pelicans and herons. In Charlotte County, near Boca Grande; embraces a group of unsurveyed mangrove and other islands. Acreage, 11,100.

Matlacha Pass Bird Refuge.—JAMES SILVER, regional director (see Atlanta, Ga.), in charge.

Established by Executive order of September 26, 1908, to protect cormorants, brown pelicans, and herons. In Lee County; embraces three small islands near the mouth of the Caloosahatchee River. Acreage, 10.

Pine Island Bird Refuge.—JAMES SILVER, regional director (see Atlanta, Ga.), in charge.

Established by Executive order of September 15, 1908, to protect brown pelicans and herons. In Lee County; embraces Bird, Lower, and Middle Islands in Pine Island Sound. Acreage, 31.

Brooksville

Chinsegut Migratory Bird Refuge.—JAMES SILVER, regional director (see Atlanta, Ga.), in charge.

Acquired by gift in 1932 to protect ducks, geese, shore birds and upland-game birds. In Hernando County. Acreage, 2,033.

Cedar Keys

Cedar Keys Bird Refuge.—JAMES SILVER, regional director (see Atlanta, Ga.), in charge.

Established by Executive order of July 16, 1929, to protect pelicans, cormorants, and aquatic birds, including herons. In Levy County; embraces Snake Key, Dead Man or Bird Key, and North Key in the island group known as Cedar Keys. Acreage, 379.

Daytona Beach

Game protection.—P. O. Box 1366. J. V. KELSEY, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Florida.

Fort Myers

Caloosahatchee Bird Refuge.—JAMES SILVER, regional director (see Atlanta, Ga.), in charge.

Established by Executive order of July 1, 1920, to protect several species of herons. In Lee County; embraces eight mangrove islets east of Beautiful Island in the Caloosahatchee River. Acreage, 40.

Key West

Great White Heron Refuge.—Box 466. EARLE R. GREENE, under refuge manager, in charge.

Established by Executive order of October 27, 1938, to protect great white herons and other birds, including the white-crowned pigeon. In Monroe County; embraces part of the Florida Keys near Key West. Acreage, approximately 2,000.

Key West Bird Refuge.—JAMES SILVER, regional director (see Atlanta, Ga.), in charge.

Established by Executive order of August 8, 1908, to protect cormorants, pelicans, man-o'-war birds, roseate spoonbills, white

ibises, and herons. In Monroe County; embraces 35 small islands in an area 20 miles long and 10 miles wide, west of Key West. Acreage, 2,030.

New Smyrna

Brevard Bird Refuge.—JAMES SILVER, regional director (see Atlanta, Ga.), in charge.

Established by Executive order of October 21, 1925, to protect brown pelicans. In Brevard County, in Mosquito Lagoon on the east coast of Florida. Acreage, 12.

St. Augustine

Matanzas Bird Refuge.—JAMES SILVER, regional director (see Atlanta, Ga.), in charge.

Established by Executive order of August 10, 1927, to protect terns, black skimmers, and clapper rails. In St. Johns County; embraces a group of marsh islands in the Matanzas River, about 15 miles from St. Augustine; formerly part of the Matanzas Military Reservation. Acreage, 267.

St. Marks

St. Marks Migratory Bird Refuge.—DONALD V. GRAY, assistant refuge manager, in charge.

Established by Executive order of October 31, 1931, to protect ducks, geese, shore birds, gulls, terns, raccoons, otters, and deer. In Jefferson, Taylor, and Wakulla Counties, on the Gulf Coast of Florida. Acreage, 89,800.

St. Petersburg

Indian Key Bird Refuge.—JAMES SILVER, regional director (see Atlanta, Ga.), in charge.

Established by Executive order of February 10, 1906, to protect brown pelicans, white ibises, egrets, and Louisiana and little blue herons. In Pinellas County; embraces Indian or Bird, Bush or Tarpon, Pine, Cow, and Calf Keys. Acreage, 191.

Palma Sola Bird Refuge.—JAMES SILVER, regional director (see Atlanta, Ga.), in charge.

Established by Executive order of September 26, 1908, to protect man-o'-war birds and herons. In Manatee County, a small island in Palma Sola Bay. Acreage, 2.

Passage Key Bird Refuge.—JAMES SILVER, regional director (see Atlanta, Ga.), in charge.

Established by Executive order of October 10, 1905, to protect laughing gulls, terns, skimmers, cormorants, and sandpipers. In Manatee County, near the mouth of Tampa Bay. Acreage, 36.

Sebastian

Pelican Island Bird Refuge.—JAMES SILVER, regional director (see Atlanta, Ga.), in charge.

Established by Executive order of March 14, 1903, to protect brown pelicans. In Indian River County, opposite Sebastian. Acreage, 15.

GEORGIA

Cooperative wildlife research unit.—(See Auburn, Ala.)

Food habits research.—(See Pilot Town, La.)

Forest fauna research.—(See Gulfport, Miss.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

Native game-bird research.—(See Charleston, S. C.)

Predator and rodent control.—(See Raleigh, N. C.)

Atlanta

Construction and C. C. C. operations.—1013 Glenn Building. MILLARD I. FROST, C. C. C. inspector, in charge.

Supervision and coordination of C. C. C. work at Bureau camps, being responsible for efficiency and economy of operations and for compliance with Bureau and C. C. C. requirements. In Georgia, Florida, Maryland, North Carolina, South Carolina, and Virginia.

In cooperation with the Civilian Conservation Corps.

Federal aid in wildlife restoration.—1013 Glenn Building. WILLIAM J. HOWARD, associate regional inspector, in charge.

General supervision in all matters pertaining to the Federal Aid to Wildlife Restoration Act, subject to instructions from the regional director. In region No. 7 (except District of Columbia), comprising Georgia, Florida, Maryland, North Carolina, South Carolina, and Virginia.

National wildlife-refuge supervision.—1013 Glenn Building. E. P. CREASER, associate refuge manager, in charge.

General supervision of refuge development and maintenance in region No. 7 (except the District of Columbia), comprising

Florida, Georgia, Maryland, North Carolina, South Carolina, and Virginia.

Regional office.—1013 Glenn Building. JAMES SILVER, regional director, in charge.

General supervision of all field activities of the Biological Survey, except those pertaining to research, land acquisition, and importations of birds and mammals; subject to instructions directly from the Chief of Bureau or the chiefs of Washington divisions and sections. In region No. 7 (Southeastern), comprising Georgia, District of Columbia, Florida, Maryland, North Carolina, South Carolina, and Virginia.

Darien

Wolf Island Wildlife Refuge.—JAMES SILVER, regional director (see Atlanta), in charge.

Established by Executive order of April 3, 1930, to protect waterfowl. In McIntosh County; embraces a portion of Wolf Island, off the coast of Georgia, between Doboy and Altamaha Sounds. Acreage, 575.

Eatonton

Piedmont Wildlife Refuge.—RAYMOND J. FLEETWOOD, assistant refuge manager, in charge.

Established by Executive order of January 18, 1939, to protect waterfowl, quails, wild turkeys, deer, and other wildlife. In Jasper and Jones Counties. Acreage, approximately 40,000.

In cooperation with the Georgia Experiment Station, United States Forest Service, and the Bureau of Agricultural Economics.

Sapelo

Blackbeard Island Bird Refuge.—R. F. D. No. 1, Port Wentworth, Savannah. HAYDEN A. CARTER, junior refuge manager, in charge.

Established by Executive order of September 20, 1926, to protect mallards, black ducks, Wilson's snipes, turnstone, sandpipers, doves, herons, rails, quails, gulls, terns, many species of insectivorous and nongame birds, raccoons, opossums, and deer. In McIntosh County, at the entrance to Sapelo Sound. Acreage, 4,659.

Savannah

Game protection.—Route 3. JOHN C. S. BOSWELL, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Georgia.

Savannah River Wildlife Refuge.—R. F. D. No. 1, Port Wentworth. HAYDEN A. CARTER, junior refuge manager, in charge.

Established by Executive order of April 6, 1927, to protect ducks, woodcocks, Wilson's snipes, wild turkeys, herons, and rails. In Chatham County, Ga., and Jasper and Beaufort Counties, S. C. Acreage, 12,918.

Tybee Migratory Bird Refuge.—JAMES SILVER, regional director (see Atlanta), in charge.

Established by Executive order of May 9, 1938, to protect certain species of colonial birds. In Chatham County, in the Savannah River within a few hundred yards of the Fort Pulaski National Monument. Acreage, 100.

In cooperation with the Department of Commerce and the War Department.

Waycross

Okefenokee Wildlife Refuge.—Room 1, Federal Building. P. O. Box 117. JOHN M. HOPKINS, agent, in charge.

Established by Executive order of March 30, 1937, to protect ducks, ivory-billed woodpeckers, ospreys, limpkins, sandhill cranes, and Mississippi alligators. In Charlton, Clinch, and Ware Counties. Acreage, 293,826.

HAWAIIAN ISLANDS

Johnston Island Bird Refuge.

Established by Executive order of June 29, 1926, to protect sooty and noddy terns, wedge-tailed shearwaters, petrels, boobies, and man-o'-war birds. In the Pacific Ocean, about 700 miles southwest of Honolulu; embraces Johnston and Sand Islands. Acreage, 100.

Honolulu

Hawaiian Islands Bird Refuge.—THOMAS R. L. MCGUIRE, United States deputy reservation protector, in charge.

Established by Executive order of February 3, 1909, to protect terns, albatrosses, shearwaters, petrels, gannets, man-

o'war birds, Laysan teals, rails, and finches. In the north-western extension of the Hawaiian archipelago; embraces Laysan, Laysianski, Necker, and other islands and reefs extending about 1,000 miles in the Leeward Islands. Acreage, 623.

Inspection of importations.—L. A. WHITNEY and D. T. FULLAWAY, cooperative inspectors, in charge.

Inspection at the port of Honolulu of importations of foreign birds and wild animals to prevent the introduction of harmful species.

IDAHO

Construction and C. C. C. operations.—(See Portland, Oreg.)

Cooperative wildlife research unit.—(See Logan, Utah.)

Disease control research.—(See Los Angeles, Calif.; Brigham, Utah; and Pullman, Wash.)

Federal aid in wildlife restoration.—(See Denver, Colo.)

Food habits research.—(See Burns, Oreg.; Denver, Colo.; and Brigham, Utah.)

Game management surveys.—(See Boise, Idaho; Cache, Okla.; Seattle, Wash.; and Jackson, Wyo.)

Land acquisition.—(See Denver, Colo.)

Migratory birds research.—(See Berkeley, Calif., and Denver, Colo.)

National wildlife-refuge supervision.—(See Denver, Colo.)

Regional office.—(See Denver, Colo.)

Boise

Game management surveys.—Bureau of Biological Survey, Boise. WILLIAM H. MARSHALL, junior biologist, in charge.

Game management and population studies of all species of wildlife, with special reference to fur bearers. In Minnesota, Wisconsin, and all States west of the Mississippi River.

Game protection.—P. O. Box 1695. GEORGE M. RIDDICK, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Idaho.

Predator and rodent control.—State Capitol. P. O. Box 1998. GEORGE E. HOLMAN, district agent, in charge.

State-wide activities in the control of (1) wolves, coyotes, and other animals killing stock and game, and (2) pocket gophers, ground squirrels, and other injurious rodents.

In cooperation with extension division, State College of Agriculture, and the State Predatory-animal Board.

Carey

Predator and rodent control.—BENJAMIN L. EVANS, junior district agent, in charge.

Hamer

Camas Migratory Waterfowl Refuge.—HOWARD J. SARGEANT, assistant refuge manager, in charge.

Established by Executive order of October 8, 1937, to protect ducks, geese, and upland game birds. In Jefferson County. Acreage, 10,592.

Lewiston

Predator and rodent control.—ROY T. TUMELSON, agent (predatory-animal hunter), in charge.

Nampa

Deer Flat Migratory Waterfowl Refuge.—Box 942. RALPH C. WINSLOW, junior refuge manager, in charge.

Established by Executive order of February 25, 1909, to protect ducks, geese, and upland game birds. In Canyon County, on the Boise reclamation project. Acreage, 10,252.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Snake River Migratory Waterfowl Refuge.—Box 942. RALPH C. WINSLOW, junior refuge manager, in charge.

Established by Executive order of August 17, 1937, to protect ducks, geese, and other migratory birds. In Canyon County; embraces a group of islands in the Snake River. Acreage, 336.

Pocatello

Predator and rodent control.—P. O. Box 69. LEO S. TWITCHELL, junior district agent, in charge.

U. S. Biological Survey Supply Depot.—P. O. Box 749. PAUL T. QUICK, associate biologist, in charge.

Distribution of field supplies and of baits for use in predatory-animal and rodent control in the United States.

In cooperation with the Pocatello Chamber of Commerce.

Rupert

Minidoka Wildlife Refuge.—P. O. Box 942, Nampa. RALPH C. WINSLOW, junior refuge manager, in charge.

Established by Executive order of February 25, 1909, to protect grebes, Forster's terns, cormorants, white pelicans, ducks, herons, coots, avocets, and sage grouse. In Cassia, Blaine, and Minidoka Counties, on the Minidoka reclamation project. Acreage, 25,332.

In cooperation with the Bureau of Reclamation, Department of the Interior.

ILLINOIS

Construction and C. C. C. operations.—(See Boston, Mass.)

Cooperative wildlife research unit.—(See Columbus, Ohio; Ames, Iowa; and Columbia, Mo.)

Federal aid in wildlife restoration.—(See Milwaukee, Wis.)

Land acquisition.—(See Des Moines, Iowa.)

National wildlife-refuge supervision.—(See Milwaukee, Wis.)

Regional office.—(See Milwaukee, Wis.)

Rodent control.—(See La Fayette, Ind.)

Upper Mississippi River Wildlife and Fish Refuge.—(See Winona, Minn.)

Chicago

Game protection.—Brevoort Hotel. JOHN E. PERRY, United States game management agent, in charge.

Mainly enforcement of Lacey Act, and incidentally enforcement of the Migratory Bird Treaty Act and Migratory Bird Hunting Stamp Act. In Illinois.

Edwardsville

Migratory birds research.—General delivery. CHARLES E. GILLHAM, associate biologist, in charge.

Investigations of abundance, movements, and factors affecting migratory waterfowl and other birds on the Mississippi Flyway. In Illinois, Arkansas, Indiana, Iowa, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, North Dakota, Ohio, South Dakota, Tennessee, Texas, Wisconsin, Canada, and Mexico.

In cooperation with State and Provincial game departments in the United States, Mexico, and Canada, and with cooperating observers.

Havana

Chautauqua Migratory Waterfowl Refuge.—PHILIP NELSON, under refuge manager, in charge.

Established by Executive order of January 8, 1937, to protect ducks, geese, grebes, raccoons, red foxes, and muskrats. In Mason County, in the Illinois River bottoms. Acreage, 4,166.

Peoria

Game protection.—333 Federal Building. JOHN M. MARTIN, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Illinois.

INDIANA

Construction and C. C. C. operations.—(See Boston, Mass.)

Cooperative wildlife research unit.—(See Columbus, Ohio.)

Federal aid in wildlife restoration.—(See Milwaukee, Wis.)

Game protection.—(See Henderson, Ky., and Sylvania, Ohio.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Edwardsville, Ill.)

National wildlife-refuge supervision.—(See Milwaukee, Wis.)

Regional office.—(See Milwaukee, Wis.)

La Fayette

Rodent control.—Experiment station annex, Purdue University. GALEN C. ODERKIRK, district agent, in charge.

State-wide activities in the control of injurious rodents. In Indiana, Illinois, Iowa, Kentucky, Michigan, Minnesota, Missouri, Ohio, and Wisconsin.

In cooperation with the Departments of Agriculture Extension for Purdue University, the University of Illinois, and the University of Wisconsin.

IOWA

Construction and C. C. C. operations.—(See Omaha, Nebr.)

Disease control research.—(See Brigham, Utah.)

Food habits research.—(See Burns, Oreg., Denver, Colo., and Brigham, Utah.)

Game management surveys.—(See Boise, Idaho; Jackson, Wyo.; and Cache, Okla.)

Migratory birds research.—(See Denver, Colo., and Edwardsville, Ill.)

Rodent control.—(See La Fayette, Ind.)

Upper Mississippi River Wildlife and Fish Refuge.—(See Winona, Minn.)

Algona

Union Slough Migratory Waterfowl Refuge.—GEORGE TONKIN, regional director (see Des Moines), in charge.

Established by Executive order of September 19, 1938, to protect migratory birds and waterfowl. In Kossuth County. Acreage, 1,335.

Ames

Cooperative wildlife research unit.—Care of Iowa State College. THOMAS G. SCOTT, agent, in charge.

Conducts research on wildlife management problems. In Iowa, Illinois, Kansas, Minnesota, Nebraska, South Dakota, and Wisconsin.

In cooperation with the Iowa State College, Iowa State Conservation Commission, and the American Wildlife Institute.

Des Moines

Federal aid in wildlife restoration.—207-A Federal Office Building. _____, regional inspector, in charge.

General supervision in all matters pertaining to the Federal Aid to Wildlife Restoration Act; subject to instructions from the regional director. In region No. 4, comprising Iowa, Minnesota, and Missouri.

Game protection.—207-A Federal Building. JESSE F. THOMPSON, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Iowa.

Land acquisition.—227 Federal Office Building. CHAS. S. COOK, associate cadastral engineer, in charge.

Examinations, appraisals, negotiations, and surveys for the acquisition of lands for refuge purposes. In central area, comprising Alabama, Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Tennessee, West Virginia, and Wisconsin.

Regional office.—207-A Federal Office Building. GEORGE TONKIN, regional director, in charge.

General supervision of all field activities, except those pertaining to research, land acquisition, and importations of birds and mammals; subject to instructions directly from Chief of Bureau or the chiefs of Washington divisions and sections. In region No. 4 (West Central), comprising Iowa, Missouri, and Minnesota.

KANSAS

Construction and C. C. C. operations.—(See Omaha, Nebr.)

Cooperative wildlife research unit.—(See Columbia, Mo., and Ames, Iowa.)

Disease control research.—(See Brigham, Utah.)

Federal aid in wildlife restoration.—(See Omaha, Nebr.)

Food habits research.—(See Burns, Oreg.; Denver, Colo.; and Brigham, Utah.)

Forest fauna research.—(See St. Paul, Minn.)

Game management surveys.—(See Boise, Idaho; Jackson, Wyo.; and Cache, Okla.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Denver, Colo.)

National wildlife-refuge supervision.—(See Omaha, Nebr.)

Regional office.—(See Omaha, Nebr.)

Rodent control.—(See Oklahoma City, Okla.)

Garden City

Game protection.—P. O. Box 864. JOHN Q. HOLMES, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Kansas.

KENTUCKY

Construction and C. C. C. operations.—(See Boston, Mass.)

Cooperative wildlife research unit.—(See Blacksburg, Va., Columbia, Mo., and Columbus, Ohio.)

Federal aid in wildlife restoration.—(See Milwaukee, Wis.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Charleston, S. C., and Edwardsville, Ill.)

National wildlife-refuge supervision.—(See Milwaukee, Wis.)

Native game-bird research.—(See Charleston, S. C.)

Regional office.—(See Milwaukee, Wis.)

Rodent control.—(See La Fayette, Ind.)

Eddyville

Kentucky Woodlands Wildlife Refuge.—Route 2. GERALD BAKER, associate refuge manager, in charge.

Established by Executive order of August 30, 1938, to protect waterfowl, white-tailed deer, and quail and other small game. In Trigg and Lyons Counties, between the Tennessee and Cumberland Rivers. Acreage, 47,000.

Henderson

Game protection.—P. O. Box 364. ROBERT C. SOAPER, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Kentucky, southern Indiana, southern Ohio, and West Virginia.

LOUISIANA

Cooperative wildlife research unit.—(See College Station, Tex.)

Disease control research.—(See Brigham, Utah.)

Food habits research.—(See Pilot Town, La.; Denver, Colo.; Burns, Oreg.; and Brigham, Utah.)

Forest fauna research.—(See Gulfport, Miss.)

Game management surveys.—(See Boise, Idaho; Cache, Okla.; and Jackson, Wyo.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Denver, Colo., and Edwardsville, Ill.)

Rodent control.—(See State College, Miss.)

Houma

East Timbalier Island Bird Refuge.—ROY MOORE, regional director (see New Orleans), in charge.

Established by Executive order of December 7, 1907, to protect gulls, terns, skimmers, brown pelicans, herons, and rails. In Terre Bonne Parish; a marshy island off the south coast of the parish. Acreage, 337.

Lake Arthur

Lacassine Migratory Waterfowl Refuge.—EARL L. ATWOOD, junior refuge manager, in charge.

Established by Executive order of December 30, 1937, to protect ducks, geese, Louisiana and little blue herons, American

egrets, and other birds. In Cameron Parish, about 20 miles inland from the Gulf. Acreage, 31,116.

New Orleans

Construction and C. C. C. operations.—1105 Masonic Temple Building. E. H. HACKENBERG, C. C. C. inspector, in charge.

Supervision and coordination of C. C. C. work at Bureau camps, being responsible for efficiency and economy of operations and for compliance with Bureau and C. C. C. requirements. In Louisiana, Alabama, Arizona, Arkansas, Mississippi, New Mexico, Oklahoma, Tennessee, and Texas.

In cooperation with the Civilian Conservation Corps.

Federal aid in wildlife restoration.—1105 Masonic Temple Building. ———, regional inspector, in charge.

General supervision in all matters pertaining to the Federal Aid to Wildlife Restoration Act; subject to instructions from the regional director. In region No. 5, comprising Louisiana, Alabama, Arkansas, Mississippi, and Tennessee.

Game protection.—1105 Masonic Temple Building. LAWRENCE J. MEROVKA, United States game management agent, in charge, and CECIL B. PETTEPHER, United States game management agent (at large).

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Louisiana and southwestern Mississippi.

National wildlife-refuge supervision.—1105 Masonic Temple Building. JOHN H. SUTHERLIN, associate refuge manager, in charge.

General supervision of refuge development and maintenance in region No. 5, comprising Alabama, Arkansas, Louisiana, Mississippi, and Tennessee.

Regional office.—1105 Masonic Temple Building. ROY MOORE, regional director, in charge.

General supervision of all field activities of the Biological Survey, except those pertaining to research, land acquisition, and importations of birds and mammals; subject to instructions directly from the Chief of Bureau or the chiefs of Washington divisions and sections. In region No. 5 (Southern), comprising Louisiana, Alabama, Arkansas, Mississippi, and Tennessee.

Olga

Breton Bird Refuge.—ROY MOORE, regional director (see New Orleans), in charge.

Established by Executive order of October 4, 1904, to protect gulls, terns, skimmers, herons, and willets. In Plaquemines Parish; embraces Breton Island in Breton Sound, north of the Mississippi River Delta, and Old Harbor and Freemason Islands. Acreage, 25,955.

Pilot Town

Delta Migratory Waterfowl Refuge.—SAMUEL H. LAMB, assistant refuge manager, in charge.

Established by Executive order of November 19, 1935, to protect ducks, geese, curlews, plovers, coots, cormorants, ibises, and terns. In Plaquemines Parish. Acreage, 49,613.

Food habits research.—Care of Delta Migratory Waterfowl Refuge. JOHN J. LYNCH, junior biologist, in charge.

Investigations of waterfowl foods and of the factors affecting the development and maintenance of areas for waterfowl production in the southern coastal region. In Louisiana, Alabama, Arkansas, Florida, Georgia, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, and Texas.

Tern Islands Bird Refuge.—ROY MOORE, regional director (see New Orleans), in charge.

Established by Executive order of August 8, 1907, to protect gulls, terns, and brown pelicans. In Plaquemines Parish; embraces all small islets, commonly called mud lumps, in or near the mouth of the Mississippi River. Acreage, 1,000.

Sulphur

Sabine Migratory Waterfowl Refuge.—M. R. H. Box 107. JOHN D. KILBY, assistant refuge manager, in charge.

Established by Executive order of December 7, 1937, to protect ducks, geese, shore birds, white-tailed deer, otters, foxes, and muskrats. In Cameron Parish, bordering on the Gulf of Mexico. Acreage, 139,249.

Weeks Island

Shell Keys Bird Refuge.—ROY MOORE, regional director (see New Orleans), in charge.

Established by Executive order of August 17, 1907, to protect terns, brown pelicans, and man-o'-war birds. In Iberia Parish, on a lighthouse reservation south of Marsh Island. Acreage, 77.

MAINE

Construction and C. C. C. operations.—(See Boston, Mass.)

Federal aid in wildlife restoration.—(See Boston, Mass.)

Forest fauna research.—(See New Haven, Conn.)

Fur animal research.—(See Saratoga Springs and Ithaca, N. Y.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

Regional office.—(See Boston, Mass.)

Rodent control.—(See Boston, Mass., and Portland, Maine.)

Belfast

Widows Island Migratory Bird Refuge.—S. BARRY LOCKE, regional director (see Boston, Mass.), in charge.

Established by act of Congress on December 22, 1932, to protect ducks, geese, and other birds. In Knox County. Acreage, 12.

Calais

Moosehorn Migratory Bird Refuge.—Post Office Building. WALTER P. SCHAEFER, junior refuge manager, in charge.

Established by Executive order of August 1, 1937, to protect woodcocks, ducks, grouse, deer, red foxes, moose, and caribou. In Washington County. Acreage, 16,793.

Orono

Cooperative wildlife research unit.—Care of University of Maine. CLARENCE M. ALDOUS, associate biologist, in charge.

Conducts research on wildlife management problems. In New England States.

In cooperation with the University of Maine, Commission of Inland Fisheries and Game, and the American Wildlife Institute.

Portland

Game protection.—485 Woodford Street. SAMUEL T. MILLER, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Maine, New Hampshire, and Vermont.

Rodent control.—311 Federal Building. JOHN N. HAMLET, agent, in charge.

State-wide activities in the control of injurious rodents. In Maine, New Hampshire, and Vermont.

MARYLAND

Construction and C. C. C. operations.—(See Atlanta, Ga.)

Cooperative wildlife research unit.—(See State College, Pa., and Blacksburg, Va.)

Federal aid in wildlife restoration.—(See Atlanta, Ga.)

Fur animal research.—(See Beltsville and Cambridge, Md.; Swarthmore, Pa.; and Ithaca, N. Y.)

Game protection.—(See Cambridge, Md., and Tappahannock, Va.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

National wildlife-refuge supervision.—(See Atlanta, Ga.)

Native game-bird research.—(See Charleston, S. C.)

Regional office.—(See Atlanta, Ga.)

Rodent control.—(See Washington, D. C.)

Beltsville

Fur animal research.—Care of National Agricultural Research Center. THORA M. PLITT, assistant microanalyst, in charge.

Microscopic examinations of fur-fiber structures.

In cooperation with the Bureau of Animal Industry.

Bowie

Disease control research.—Care of Patuxent Research Refuge. DON R. COBURN, associate veterinarian, in charge.

Laboratory and field investigations of diseases of fur bearers, big game, migratory birds, upland game, and other wildlife. In Maryland, Delaware, New Jersey, North Carolina, Pennsylvania, Virginia, and West Virginia.

Food habits research.—Care of Patuxent Research Refuge.
RALPH B. NESTLER, associate biologist, in charge.

Ecological studies of marsh and upland flora and fauna; and under the Bankhead-Jones special research project, conducts nutrition investigations on bobwhite quail. In Maryland, Delaware, New Jersey, New York, Pennsylvania, and Virginia.

In cooperation with the Bureau of Animal Industry.

Game management surveys.—Care of Patuxent Research Refuge.
LELAND C. MORLEY, associate biologist, in charge.

Game management and population studies of all forms of wildlife. In Maryland, Delaware, New Jersey, New York, Pennsylvania, Virginia, and West Virginia.

Patuxent Research Refuge.—LELAND C. MORLEY, associate biologist, in charge.

Established by Executive order of December 16, 1936, as a wildlife experiment and research refuge. Wildlife species protected include quail, turkeys, foxes, racoons, native birds, and other species present. In Anne Arundel and Prince Georges Counties. Acreage, 2,200.

Cambridge

Blackwater Migratory Bird Refuge.—R. F. D. No. 1, DAVID V. BLACK, junior refuge manager, in charge.

Purchased in 1932 under the provisions of the Migratory Bird Conservation Act to protect black ducks, blue-winged teals, mallards, pintails, and shore birds. In Dorchester County, on the Eastern Shore of Maryland, 10 miles from Cambridge. Acreage, 8,241.

Game protection.—503 School Street. ORIN D. STEELE, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Maryland (except the areas bordering the Potomac River) and the Eastern Shore of Virginia.

United States fur-animal field station.—R. F. D. No. 1. Care of Blackwater Migratory Bird Refuge. HERBERT L. DOZIER, associate biologist, in charge.

Conducts investigations in developing fur resources on refuge areas. In Maryland, Delaware, New Jersey, North Carolina, Pennsylvania, and Virginia.

MASSACHUSETTS

Cooperative wildlife research unit.—(See Orono, Maine.)

Forest fauna research.—(See New Haven, Conn.)

Fur animal research.—(See Saratoga Springs and Ithaca, N. Y.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

Boston

Construction and C. C. C. operations.—1140 Park Square Building.

O. W. TECKEMEYER, C. C. C. inspector, in charge.

Supervision and coordination of C. C. C. work at Bureau camps, being responsible for efficiency and economy of operations and for compliance with Bureau and C. C. C. requirements. In Connecticut, Delaware, Illinois, Indiana, Kentucky, Maine, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin.

In cooperation with the Civilian Conservation Corps.

Federal aid in wildlife restoration.—1140 Park Square Building.

———, regional inspector, in charge.

General supervision in all matters pertaining to the Federal Aid to Wildlife Restoration Act; subject to instructions from the regional director. In region No. 8, comprising Massachusetts, Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

Inspection of importations.—1140 Park Square Building. ———. in charge.

Inspection at the port of Boston of importations of foreign birds and wild animals to prevent the introduction of harmful species.

Regional office.—1140 Park Square Building. 31 St. James Avenue. S. BARRY LOCKE, regional director, in charge.

General supervision of all field activities of the Biological Survey, except those pertaining to research, land acquisition, and importations of birds and mammals; subject to instructions directly from the Chief of Bureau and the chiefs of Washington divisions and sections. In region No. 8 (Northeastern), comprising Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

Rodent control.—1140 Park Square Building. 31 St. James Avenue. GEO. B. LAY, district agent, in charge.

State-wide activities in the control of injurious rodents. In the New England States, Delaware, New Jersey, New York, and Pennsylvania.

South Weymouth

Game protection.—32 Sycamore Road. LEE F. BRACKETT, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Connecticut, Long Island, N. Y., Massachusetts, and Rhode Island.

Worcester

Rodent control.—410 Federal Building. W. W. DYKSTRA, agent, in charge.

State-wide activities in the control of injurious rodents. In cooperation with the State Department of Agriculture.

MICHIGAN

Construction and C.C.C. operations.—(See Boston, Mass.)

Cooperative wildlife research unit.—(See Columbus, Ohio.)

Federal aid in wildlife restoration.—(See Milwaukee, Wis.)

Forest fauna research.—(See St. Paul, Minn.)

Game protection.—(See Bay City, Mich., and Sylvania, Ohio.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Edwardsville, Ill., and Charleston, S. C.)

National wildlife refuge supervision.—(See Milwaukee, Wis.)

Regional office.—(See Milwaukee, Wis.)

Rodent control.—(See La Fayette, Ind.)

Bay City

Game protection.—318 Federal Building. P. O. Box 306. STEPHEN CREECH, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Michigan (except southern tier of counties).

Eagle River

Siskiwit Islands Bird Refuge.—DANIEL H. JANZEN, regional director (see Milwaukee, Wis.), in charge.

Established by Executive order of October 10, 1905, to protect herring gulls and ducks. In Keeweenaw County, south of Isle Royale. Acreage, 9.

Germfask

Seney Migratory Waterfowl Refuge.—C. S. JOHNSON, assistant refuge manager, in charge.

Established by Executive order of December 10, 1935, to protect ducks, grouse, prairie chickens, sand-hill cranes, beavers, deer, and other wildlife. In Schoolcraft County, in the upper peninsula of Michigan. Acreage, 86,204.

Huron

Huron Migratory Bird Refuge.—DANIEL H. JANZEN, regional director (see Milwaukee, Wis.), in charge.

Established by Executive order of January 21, 1938, to protect herring gulls and ducks. An enlargement of the Huron Island Reservation, established by Executive order of October 10, 1905, and revoked by the order designating the present refuge. In Marquette County; embraces the islands of the Huron Island group, lying near the south shore of Lake Superior. Acreage, 147.

MINNESOTA

Construction and C. C. C. operations.—(See Omaha, Nebr.)

Cooperative wildlife research unit.—(See Ames, Iowa.)

Disease control research.—(See Brigham, Utah.)

Federal aid in wildlife restoration.—(See Des Moines, Iowa.)

Food habits research.—(See Burns, Oreg., Denver, Colo., and Brigham, Utah.)

Game management surveys.—(See Boise, Idaho, Cache, Okla., and Jackson, Wyo.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Denver, Colo., and Edwardsville, Ill.)

Regional office.—(See Des Moines, Iowa.)

Rodent control.—(See La Fayette, Ind.)

Aitkin

Rice Lake Migratory Waterfowl Refuge.—P. O. Box 336. EDWARD C. KNOPP, junior refuge manager, in charge.

Established by Executive order of October 31, 1935, to protect ducks, geese, and swans. In Aitkin County. Acreage, 9,215.

Dundee

Talcot Migratory Waterfowl Refuge.—GEORGE TONKIN, regional director (see Des Moines, Iowa), in charge.

Established to protect ducks, geese, and upland game birds. In Cottonwood County. Acreage, 805.

In cooperation with the State of Minnesota Conservation Department.

Isle

Mille Lacs Bird Refuge.—GEORGE TONKIN, regional director (see Des Moines, Iowa), in charge.

Established by Executive order of May 14, 1915, to protect purple martins, terns, gulls, ducks, and geese. In Mille Lacs County; embraces Spirit and Hennepin Islands. Acreage, 1.

Middle River

Mud Lake Migratory Waterfowl Refuge.—405 Atlantic North, Thief River Falls. CARL B. VOGEN, assistant refuge manager, in charge.

Established by Executive order of March 23, 1937, to protect waterfowl, upland game birds, and shore birds. In Marshall County, at the headwaters of the Thief River. Acreage, 60,216.

Minneapolis

Disease control research.—223 Millard Hall, University of Minnesota. R. G. GREEN, collaborator, in charge.

Laboratory investigations of the accumulated field material on the diseases of all wildlife. In cooperation with the University of Minnesota.

Rochert

Tamarac Migratory Waterfowl Refuge.—GILBERT K. GIGSTEAD, junior refuge manager, in charge.

Established by Executive order of May 31, 1938, to protect ducks, swans, geese, and all species of upland game native to the

region. In Becker County, at the headwaters of the Ottertail River. Acreage, 22,117.

St. Paul

Forest fauna research.—Lake States Forest Experiment Station, University Farm. SHALER E. ALDOUS, assistant biologist, in charge.

Research on relationships of wildlife as related to forests and forest reproduction. In Minnesota, Kansas, Michigan, Nebraska, North Dakota, South Dakota, and Wisconsin.

In cooperation with the United States Forest Service.

Game protection.—820 New Post Office Building. ROBERT L. COPPES, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Minnesota.

Winona

Upper Mississippi River Wildlife and Fish Refuge.—225 Federal Building. RAY C. STEELE, superintendent, in charge.

Established by act of Congress on June 7, 1924, to protect game and nongame birds, game and fur mammals, and fishes and other aquatic life in the overflow areas of the upper Mississippi River. In Minnesota, Iowa, Illinois, and Wisconsin; between Wabasha, Minn., and Rock Island, Ill., a distance of 300 miles. Acreage, 135,686.

In cooperation with the Bureau of Fisheries, Department of Commerce.

MISSISSIPPI

Construction and C. C. C. operations.—(See New Orleans, La.)

Cooperative wildlife research unit.—(See Auburn, Ala., and Columbia, Mo.)

Federal aid in wildlife restoration.—(See New Orleans, La.)

Food habits research.—(See Pilot Town, La.)

Game protection.—(See Montgomery, Ala., New Orleans, La., and Memphis, Tenn.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Edwardsville, Ill., and Charleston, S. C.)

National wildlife-refuge supervision.—(See New Orleans, La.)

Petit Bois Island Bird Refuge.—(See Mobile, Ala.)

Regional office.—(See New Orleans, La.)

Gulfport

Forest fauna research.—Route No. 1, Oakhurst. THOS. D. BURLEIGH, associate biologist, in charge.

Research on the life history and habits of birds and mammals as related to forests and forest reproduction. In Mississippi, Alabama, Arkansas, Florida, Georgia, Louisiana, Oklahoma, and Texas.

In cooperation with the United States Forest Service.

Hampton

Yazoo Migratory Waterfowl Refuge.—ROY MOORE, regional director (see New Orleans, La.), in charge.

Established to protect waterfowl, plovers, killdeer, herons, coots, and deer, quail, and other upland game. In Washington County. Acreage, 2,440.

Starkville

Noxubee Wildlife Refuge.—FRED R. ZIMMERMAN, assistant refuge manager, in charge.

Established to protect migratory birds, wild turkeys, quail, and other wildlife. In Oktibbeha, Noxubee, and Winston Counties. Acreage, about 40,000.

In cooperation with Mississippi State College.

State College

Rodent Control.—Care of State College. ROBERT B. DEEN, district agent, in charge.

State-wide activities in the control of injurious rodents in Mississippi, Alabama, Arkansas, Louisiana, and Tennessee.

MISSOURI

Construction and C. C. C. operations.—(See Omaha, Nebr.)

Disease control research.—(See Brigham, Utah.)

Federal aid in wildlife restoration.—(See Des Moines, Iowa.)

Food habits research.—(See Burns, Oreg.; Denver, Colo.; and Brigham, Utah.)

Game management surveys.—(See Boise, Idaho; Cache, Okla.; and Jackson, Wyo.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Denver, Colo., and Edwardsville, Ill.)

Predatory-animal control.—(See Oklahoma City, Okla.)

Regional office.—(See Des Moines, Iowa.)

Rodent control.—(See La Fayette, Ind.)

Columbia

Cooperative wildlife research unit.—Wildlife Conservation Building, University of Missouri. PAUL D. DALKE, associate biologist, in charge.

Research on wildlife management problems. In Missouri, Arkansas, Illinois, Kansas, Kentucky, Mississippi, Nebraska, Oklahoma, and Tennessee.

In cooperation with the University of Missouri and the Missouri State Conservation Commission.

Jefferson City

Game protection.—201 Federal Building. CURTIS S. ALLIN, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act.

Mound City

Squaw Creek Migratory Waterfowl Refuge.—PERCY L. DE PUY, junior refuge manager, in charge.

Established by Executive order of August 23, 1935, to protect ducks, geese, pied-billed grebes, white pelicans, herons, American egrets, bitterns, plovers, sandpipers, and herring gulls. In Holt County. Acreage, 6,741.

St. Louis

Game protection.—5436 Holly Hills Avenue. HARRY BARMEIER, United States game management agent, in charge.

Mainly enforcement of Lacey Act; incidentally enforcement of Migratory Bird Treaty Act and Migratory Bird Hunting Stamp Act.

Sumner

Swan Lake Migratory Waterfowl Refuge.—KENNETH K. KRUMM, junior refuge manager, in charge.

Established by Executive order of February 27, 1937, to protect ducks and geese. In Chariton County, 25 miles from Chillicothe. Acreage, 10,716.

MONTANA

- Construction and C. C. C. operations.*—(See Omaha, Nebr.)
Disease control research.—(See Pullman, Wash., and Brigham, Utah.)
Federal aid in wildlife restoration.—(See Denver, Colo.)
Food habits research.—(See Burns, Oreg.; Denver, Colo.; and Brigham, Utah.)
Game management surveys.—(See Boise, Idaho; Jackson, Wyo.; and Cache, Okla.)
Land acquisition.—(See Denver, Colo.)
Migratory birds research.—(See Edwardsville, Ill.; Berkeley, Calif.; and Denver, Colo.)
National wildlife refuge supervision.—(See Denver, Colo.)
Regional office.—(See Denver, Colo.)

Billings

Game protection.—210 Federal Building. P. O. Box 438. KENNETH F. ROAHEN, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Montana and Wyoming.

Predator and rodent control.—216 Federal Building. P. O. Box 1251. ROBERT E. BATEMAN, district agent, in charge.

State-wide activities in the control of (1) wolves, coyotes, and other animals killing stock and game, and (2) injurious rodents.

In cooperation with the State Livestock Commission, agricultural extension service of Montana State College of Agriculture and Mechanic Arts, and the Agricultural Experiment Station.

Bozeman

Predator and rodent control.—EUGENE F. GRAND, junior district agent, in charge.

Gilman

Pishkun Migratory Waterfowl Refuge.—P. O. Box 245, Ronan. GEORGE L. GIRARD, assistant refuge manager, in charge.

Established by Executive order of December 17, 1912, to protect gulls, ducks, geese, and swans. In Teton County, on the Sun River reclamation project. Acreage, 7,715.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Willow Creek Migratory Waterfowl Refuge.—P. O. Box 245, Ronan. GEORGE L. GIRARD, assistant refuge manager, in charge.

Established by Executive order of February 25, 1909, to protect ducks, geese, shore birds, and upland game. In Lewis and Clark County, on the Sun River Reclamation Project. Acreage, 3,199.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Glasgow

Fort Peck Game Range.—LEO L. LAYTHE, regional director (see Denver, Colo.), in charge.

Established by Executive order of December 11, 1936, to protect antelopes, sharp-tailed grouse, and waterfowl. In Fergus, Garfield, Phillips, Petroleum, McCone, and Valley Counties. Acreage, 970,000.

In cooperation with the Division of Grazing, Department of the Interior.

Great Falls

Benton Lake Bird Refuge.—P. O. Box 245, Ronan. GEORGE L. GIRARD, assistant refuge manager, in charge.

Established by Executive order of November 21, 1929, to protect ducks, geese, and shore birds. In Cascade and Chouteau Counties, near the city of Great Falls. Acreage, 12,235.

Predator and rodent control.———, junior district agent, in charge.

Havre

*Greedmans Coulee Migratory Waterfowl Refuge.*²—1936. In Hill County, 30 miles northwest of Havre. Acreage, 1,680.

*Lake Thibadeau Migratory Waterfowl Refuge.*²—Established by Executive order of September 23, 1937. In Hill County, 15 miles north and 4 miles east of Havre. Acreage, 3,560.

Lakeview

Red Rock Lakes Migratory Waterfowl Refuge.—Monida, Mont. ARCHIE V. HULL, assistant refuge manager, in charge.

Established by Executive order of April 22, 1935, to protect trumpeter and whistling swans, ducks, geese, sand-hill cranes,

² An area being developed and operated as a refuge for ducks, geese, upland game birds, and other wildlife under perpetual easements obtained from the owners in the year shown after the name of the refuge. Administrative officer, Leo L. Laythe, regional director, 576 Customhouse, Denver, Colo.

curlews, grouse, sandpipers, beavers, muskrats, deer, and other wildlife. In Beaverhead County, 30 miles west of Yellowstone Park. Acreage, 27,555.

Malta

*Hewitt Lake Migratory Waterfowl Refuge.*²—Established by Executive order of March 7, 1938. In Phillips County, 33 miles northeast of Malta. Acreage, 1,520.

Lake Bowdoin Migratory Waterfowl Refuge.—P. O. Box 308. B. M. HAZELTINE, under refuge manager, in charge.

Established by Executive order of February 14, 1936, to protect ducks, geese, sand-hill cranes, avocets, pelicans, antelopes, and muskrats. In Phillips County. Acreage, 16,040.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Medicine Lake

Medicine Lake Migratory Waterfowl Refuge.—THOMAS C. HORN, assistant refuge manager, in charge.

Established by Executive order of August 19, 1935, to protect ducks, geese, western willets, avocets, spotted sandpipers, marbled godwits, horned grebes, and other birds. In Roosevelt and Sheridan Counties. Acreage, 23,438.

Miles City

Fort Keogh Bird Refuge.—LEO L. LAYTHE, regional director (see Denver, Colo.), in charge.

Established by Executive order of May 18, 1929, to protect sharp-tailed grouse, waterfowl, and other birds. In Custer County, on the site of the former Fort Keogh Military Reservation. Acreage, 56,954.

In cooperation with the Bureau of Animal Industry; Bureau of Fisheries, Department of Commerce; and the Montana Fish and Game Commission.

Moiese

Montana National Bison Range.—ROBERT S. NORTON, United States game management agent, in charge.

Established by act of Congress on May 23, 1908, primarily to assist in the perpetuation of buffalo; also protects elk, deer, mountain sheep, ducks, grouse, and pheasants. In Lake and Sanders Counties. Acreage, 18,541.

² See footnote 2, p. 59.

Pablo

Pablo Migratory Waterfowl Refuge.—P. O. Box 245, Ronan. GEORGE L. GIRARD, assistant refuge manager, in charge.

Established by Executive order of June 25, 1921, to protect ducks, geese, shore birds, and upland game birds. In Lake County, on the Flathead irrigation project. Acreage, 2,540.

In cooperation with the Bureau of Indian Affairs, Department of the Interior.

Rapelje

*Hailstone Migratory Waterfowl Refuge.*²—1936. In the northern part of Stillwater County, 6 miles northeast of Rapelje. Acreage, 2,300.

*Halfbreed Lake Migratory Waterfowl Refuge.*²—1937. In Stillwater County. Acreage, 3,080. About 25 antelope inhabit the refuge.

Ronan

Nine-Pipe Migratory Waterfowl Refuge.—P. O. Box 245. GEORGE L. GIRARD, assistant refuge manager, in charge.

Established by Executive order of June 25, 1921, to protect ducks, geese, shore birds, and upland game birds. In Lake County, on the Flathead irrigation project. Acreage, 2,022.

In cooperation with the Bureau of Indian Affairs, Department of the Interior.

Roundup

*Lake Mason Migratory Waterfowl Refuge.*²—1936. In Musselshell County, on the South Willow Creek drainage; embraces Miller Reservoir and Lake Mason. Acreage, 8,571.

Turner

*Black Coulee Migratory Waterfowl Refuge.*²—Established by Executive order of January 28, 1938. In Blaine County, 13 miles south of Turner. Acreage, 1,420.

Wibaux

*Lamesteer Migratory Waterfowl Refuge.*²—1937. In Wibaux County. Acreage, 800.

² See footnote 2, p. 59.

NEBRASKA

Cooperative wildlife research unit.—(See Columbia, Mo., and Ames, Iowa.)

Disease control research.—(See Brigham, Utah.)

Food habits research.—(See Burns, Oreg., Denver, Colo., and Brigham, Utah.)

Forest fauna research.—(See St. Paul, Minn.)

Game management surveys.—(See Cache, Okla.; Jackson, Wyo.; and Boise, Idaho.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Denver, Colo., and Edwardsville, Ill.)

Predator and rodent control.—(See Cheyenne, Wyo.)

Ellsworth

Crescent Lake Wildlife Refuge.—GILBERT E. WARDWELL, junior refuge manager, in charge.

Established by Executive order of March 16, 1931, to protect ducks, geese, shore birds, and other wildlife. In Garden County. Acreage, 42,629.

Minatare

North Platte Bird Refuge.—BURNIE MAUREK, regional director (see Omaha), in charge.

Established by Executive order of August 21, 1916, to protect ducks, geese, swans, and shore birds. In Scottsbluff and Sioux Counties, on the North Platte irrigation project. Acreage, 5,107.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Omaha

Construction and C. C. C. operations.—406 Post Office Building. P. O. Box 1269. ARTHUR F. MILLER, C. C. C. inspector, in charge.

Supervision and coordination of C. C. C. work at Bureau camps, being responsible for efficiency and economy of operations and for compliance with Bureau and C. C. C. requirements. In Nebraska, Iowa, Kansas, Minnesota, Missouri, Montana, North Dakota, and South Dakota.

In cooperation with the Civilian Conservation Corps.

Federal aid in wildlife restoration.—406 Post Office Building.
 _____, regional inspector, in charge.

General supervision in all matters pertaining to the Federal Aid to Wildlife Restoration Act, subject to instructions from the regional director. In region No. 9, comprising Kansas, Nebraska, North Dakota, and South Dakota.

Game protection.—412 Federal Building. CLYDE L. LICKING, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Nebraska.

National wildlife-refuge supervision.—406 Post Office Building. P. O. Box 1269. FRANCIS C. GILLET, associate refuge manager, in charge.

General supervision of refuge development and maintenance in region No. 9, comprising Kansas, Nebraska, North Dakota, and South Dakota.

Regional office.—406 Post Office Building. P. O. Box 1269. BURNIE MAUREK, regional director, in charge.

General supervision of all field activities of the Biological Survey, except those pertaining to research, land acquisition, and importations of birds and mammals; subject to instructions directly from the Chief of Bureau or the chiefs of Washington divisions and sections. In region No. 9 (Plains), comprising Kansas, Nebraska, North Dakota, and South Dakota.

Valentine

Fort Niobrara Game Preserve.—GENO A. AMUNDSON, United States game management agent, in charge.

Established by Executive order of January 11, 1912. Maintains herds of buffaloes and elk, and a few deer, and protects ducks, sharp-tailed grouse, quail, prairie chickens, and other birds. In north central Cherry County, 5 miles east of Valentine. Acreage, 18,537.

Valentine Migratory Waterfowl Refuge.—WARD M. SHARP, assistant refuge manager, in charge.

Established by Executive order of August 14, 1935, to protect ducks, geese, shore birds, and upland game birds. In Cherry County, in the sand-hill region. Acreage, 67,855.

NEVADA

- Construction and C. C. C. operations.*—(See Portland, Oreg.)
Cooperative wildlife research unit.—(See Logan, Utah.)
Disease control research.—(See Los Angeles, Calif.; and Brigham, Utah.)
Federal aid in wildlife restoration.—(See Portland, Oreg.)
Food habits research.—(See Sacramento, Calif.; Burns, Oreg.; Brigham, Utah; and Denver, Colo.)
Forest fauna research.—(See Berkeley, Calif.)
Game management surveys.—(See Boise, Idaho; Seattle, Wash.; Jackson, Wyo.; and Cache, Okla.)
Game protection.—(See Berkeley and Los Angeles, Calif.)
Land acquisition.—(See Denver, Colo.)
Migratory birds research.—(See Berkeley, Calif.)
Rabbit production research.—(See Fontana, Calif.)
Regional office.—(See Portland, Oreg.)

Currant

Railroad Valley Migratory Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of May 2, 1934, to protect ducks, geese, ibises, avocets, and other birds. In Nye County. Acreage, 135,184.

Elko

Ruby Lake Migratory Waterfowl Refuge.—Ruby Valley, Nev.
 HERBERT H. DILL, junior refuge manager, in charge.

Established by Executive order of July 2, 1938, to protect ducks, geese, sand-hill cranes, willets, avocets, white-faced glossy ibises, and other birds. In Elko and White Pine Counties. Acreage, 28,493.

Fallon

Fallon Wildlife Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of April 22, 1931, to protect ducks, geese, and shore birds. In Churchill County, partly within the Truckee-Carson irrigation project. Acreage, 17,902.

Las Vegas

Boulder Canyon Wildlife Refuge.—P. O. Box 1866. ROBERT E. TOWLE, junior refuge manager, in charge.

Established by Executive order of March 3, 1933, to protect shore birds, herons, smaller migrant birds, and waterfowl. In Mohave County, Ariz., and Clark County, Nev. Acreage, 658,490.

In cooperation with the Bureau of Reclamation and National Park Service, Department of the Interior.

Desert Game Range.—JOSEPH CLARK ALLEN, superintendent, in charge.

Established by Executive order of May 20, 1936, to protect Nelson's mountain sheep, or desert bighorns. In Clark and Lincoln Counties. Acreage, 2,022,000.

In cooperation with the Division of Grazing, Department of the Interior.

Reno

Predator and rodent control.—312 Post Office Building, G. HAMMOND HANSON, district agent, in charge.

State-wide activities in the control of (1) wolves, coyotes, and other animals killing stock and game, and (2) ground squirrels and other injurious rodents.

In cooperation with the agricultural extension service, University of Nevada; and the Nevada State Department of Agriculture.

Sutcliffe

Anaho Island Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of September 4, 1913, to protect gulls, cormorants, and white pelicans. In Washoe County, in Pyramid Lake. Acreage, 248.

Vya

Charles Sheldon Antelope Range.—Cedarville, Calif. E. R. SANS, superintendent, in charge.

Established by Executive order of December 21, 1936, to provide winter range for antelopes and mule deer. In Humboldt and Washoe Counties; adjoins and supplements the Charles Sheldon Antelope Refuge. Acreage, about 547,000.

In cooperation with the Division of Grazing, Department of the Interior.

Charles Sheldon Wildlife Refuge.—Cedarville, Calif. E. R. SANS, superintendent, in charge.

Established by Executive order of January 26, 1931, to perpetuate antelopes and sage hens, and protect mule deer. In the northern part of Washoe County. Acreage, 34,325.

Winnemucca

Winnemucca Migratory Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of August 19, 1936, to protect ducks, geese, and other birds. In Pershing and Washoe Counties. Acreage, 11,915.

In cooperation with the Department of the Interior.

NEW HAMPSHIRE

Construction and C. C. C. operations.—(See Boston, Mass.)

Cooperative wildlife research unit.—(See Orono, Maine.)

Federal aid in wildlife restoration.—(See Boston, Mass.)

Forest fauna research.—(See New Haven, Conn.)

Fur animal research.—(See Saratoga Springs and Ithaca, N. Y.)

Game protection.—(See Portland, Maine.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

Regional office.—(See Boston, Mass.)

Rodent control.—(See Boston, Mass., and Portland, Maine.)

NEW JERSEY

Construction and C. C. C. operations.—(See Boston, Mass.)

Cooperative wildlife research unit.—(See State College, Pa.)

Disease control research.—(See Bowie, Md.)

Federal aid in wildlife restoration.—(See Boston, Mass.)

Food habits research.—(See Bowie, Md.)

Fur animal research.—(See Swarthmore, Pa., Cambridge, Md., and Saratoga Springs and Ithaca, N. Y.)

Game management surveys.—(See Bowie, Md.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

Regional office.—(See Boston, Mass.)

Rodent control.—(See Boston, Mass.)

New Brunswick

Rodent control.—Short Course Building, New Jersey State College of Agriculture. E. M. MILLS, assistant district agent, in charge.

State-wide activities in the control of injurious rodents. In New Jersey and Delaware.

Pleasantville

Game protection.—18 Lake Place. ALBERT STADLMEIR, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In New Jersey, Delaware, and in southeastern Pennsylvania.

Salem

Killcohook Migratory Bird Refuge.—S. BARRY LOCKE, regional director (see Boston, Mass.), in charge.

Established by Executive order of February 3, 1934, to protect black ducks, muskrats, and waterfowl. In New Castle County, Del., and Salem County, N. J. Acreage, 1,442.

NEW MEXICO

Construction and C. C. C. operations.—(See New Orleans, La.)

Cooperative wildlife research unit.—(See Logan, Utah; and College Station, Tex.)

Disease control research.—(See Brigham, Utah.)

Food habits research.—(See Burns, Oreg., Denver, Colo., and Brigham, Utah.)

Forest fauna research.—(See Berkeley, Calif.)

Game management surveys.—(See Carlsbad, N. Mex.; Van Horn, Tex.; Boise, Idaho; Jackson, Wyo.; and Cache, Okla.)

Land acquisition.—(See Denver, Colo.)

Migratory birds research.—(See Denver, Colo.)

Albuquerque

Federal aid in wildlife restoration.—P. O. Box 1306. J. STOKLEY LIGON, regional inspector, in charge.

General supervision in all matters pertaining to the Federal Aid to Wildlife Restoration Act; subject to instructions from

the regional director. In region No. 3, comprising New Mexico, Arizona, Oklahoma, and Texas.

Game protection.—402 Federal Building. P. O. Box 1306. VERNON D. YELTON, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In New Mexico and western Texas.

National wildlife-refuge supervision.—402 Federal Building. P. O. Box 1306. WILLIAM T. KRUMMES, associate refuge manager, in charge.

General supervision of refuge development and maintenance in region No. 3, comprising Arizona, New Mexico, Oklahoma, and Texas.

Predator and rodent control.—401 Federal Building Annex. J. C. GATLIN, district agent, in charge.

State-wide activities in the control of (1) wolves, coyotes, and other animals killing stock and game, and (2) pocket gophers, prairie dogs, and other injurious rodents.

In cooperation with the State College of Agriculture and Mechanic Arts.

Regional office.—402 Federal Building. P. O. Box 1306. DONALD A. GILCHRIST, regional director, in charge.

General supervision of all field activities of the Bureau of Biological Survey, except those pertaining to research, land acquisition, and importations of birds and mammals; subject to instructions directly from the Chief of Bureau or the chiefs of Washington divisions and sections. In region No. 3 (Southwestern), comprising Arizona, New Mexico, Oklahoma, and Texas.

Carlsbad

Carlsbad Bird Refuge.—DONALD A. GILCHRIST, regional director (see Albuquerque), in charge.

Established by Executive order of February 25, 1909, to protect ducks and shore birds. In Eddy County, on the Carlsbad reclamation project. Acreage, 18,080.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Game management surveys.—EARL ZIMMERMAN, agent, in charge.

A study of the limiting factors governing the increase of big-horn sheep in the Guadalupe Mountains of New Mexico and Texas.

In cooperation with the New Mexico Game and Fish Commission, Texas Game, Fish, and Oyster Commission, and United States Forest Service. (Effective March 1, 1939.)

Elephant Butte

Rio Grande Wildlife Refuge.—DONALD A. GILCHRIST, regional director (see Albuquerque), in charge.

Established by Executive order of February 25, 1909, to protect grebes, cormorants, ducks, geese, and shore birds. In Sierra County, on the Rio Grande reclamation project. Acreage, 73,226.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Roswell

Bitter Lakes Migratory Waterfowl Refuge.—P. O. Box 562.

A. D. CAMPBELL, junior range examiner, in charge.

Established by Executive order of October 8, 1937, to protect ducks, geese, avocets, black-necked stilts, sand-hill cranes, muskrats, and other wildlife. In Chaves County. Acreage, 21,524.

Socorro

Bosque del Apache Migratory Waterfowl Refuge.—DONALD A. GILCHRIST, regional director (see Albuquerque), in charge.

Established to protect ducks, especially the New Mexican duck, and sand-hill cranes, golden eagles, Arizona-scaled quails, ring-billed gulls, and other wildlife. In Socorro County. Acreage, 56,088.

NEW YORK

Construction and C. C. C. operations.—(See Boston, Mass.)

Cooperative wildlife research unit.—(See State College, Pa.)

Federal aid in wildlife restoration.—(See Boston, Mass.)

Food habits research.—(See Bowie, Md.)

Forest fauna research.—(See New Haven, Conn.)

Fur animal research.—(See Swarthmore, Pa.; Saratoga Springs, and Ithaca, N. Y.)

Game management surveys.—(See Bowie, Md.)

Game protection.—(See South Weymouth, Mass., and Owego, N. Y.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

Regional office.—(See Boston, Mass.)

Rodent control.—(See Boston, Mass.)

Hampton Bays

Shinnecock Migratory Bird Refuge.—S. BARRY LOCKE, regional director (see Boston, Mass.), in charge.

Established by Executive order of January 8, 1937, to protect migratory birds and other wildlife. In Suffolk County, Long Island. Acreage, 8.

In cooperation with the Bureau of Lighthouses, Department of Commerce.

Ithaca

Fur animal research.—Laboratory of animal nutrition, Cornell University. JOHN K. LOOSLI, agent, in charge.

Under the Bankhead-Jones special research project, conducts investigations on the nutritive requirements for growth, fur production, and reproduction of foxes and minks. In Delaware, Maryland, New Jersey, New York, Pennsylvania, and the New England States.

In cooperation with Cornell University.

Native game-bird research.—Department of Poultry Husbandry, Cornell University. WILLIAM H. LONG, agent, in charge.

Metabolism studies of game birds.

In cooperation with Cornell University and New York State Conservation Department.

Rodent control.—WELDON B. ROBINSON, agent, in charge.

Montauk

Fort Tyler Migratory Bird Refuge.—S. BARRY LOCKE, regional director (see Boston, Mass.), in charge.

Established by Executive order of August 2, 1938, to protect migratory birds and other wildlife. In Suffolk County; on Gardiners Island, about 5 miles from Montauk. Acreage, 14.

New York City

Inspection of importations.—196 Market Street, Newark, N. J.
BEECHER S. BOWDISH, agent, in charge.

Inspection at the port of New York of importations of foreign birds and wild animals to prevent the introduction of harmful species.

Owego

Game protection.—63 McMaster Street. PHILIP S. FARNHAM,
United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In New York, except Long Island, and in northwestern Pennsylvania.

Poughkeepsie

Control methods research.—R. F. D. No. 3, Rochdale Road.
D. A. SPENCER, assistant biologist, in charge.

Research in methods of injurious-rodent control.

Saratoga Springs

United States Fur Animal Experiment Station.—CHARLES F.
BASSETT, biologist, in charge.

Investigations in the economical and practical methods of breeding, feeding, and managing fur animals in captivity. In New York, Delaware, New Jersey, Pennsylvania, and the New England States.

Seneca Falls

Montezuma Migratory Bird Refuge.—201 Federal Building.
MERTON RADWAY, junior refuge manager, in charge.

Established by Executive order of September 12, 1938, to protect ducks, coots, rails, bitterns, and other birds. In Seneca County, in the Finger Lakes district. Acreage, 5,845.

NORTH CAROLINA

Construction and C. C. C. operations.—(See Atlanta, Ga.)

Cooperative wildlife research unit.—(See Blacksburg, Va.)

Disease control research.—(See Bowie, Md.)

Federal aid in wildlife restoration.—(See Atlanta, Ga.)

Food habits research.—(See Pilot Town, La.)

Fur animal research.—(See Cambridge, Md.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

National wildlife-refuge supervision.—(See Atlanta, Ga.)

Native game-bird research.—(See Charleston, S. C.)

Regional office.—(See Atlanta, Ga.)

Manteo

Pea Island Migratory Waterfowl Refuge.—S. A. WALKER, under refuge manager, in charge.

Established by Executive order of April 8, 1938, to protect brant, geese, redheads, and other species of ducks, and black-crowned night herons. In Dare County. Acreage, 38,100.

New Holland

Lake Mattamuskeet Wildlife Refuge.—MAYNARD S. JOHNSON, assistant refuge manager, in charge.

Established by Executive order of December 18, 1934, to protect ducks, geese, swans, and shore birds. The most important goose and swan wintering refuge on the Atlantic coast. In Hyde County, on the northwest side of Pamlico Sound. Acreage, 50,476.

Raleigh

Predator and rodent control.—Extension Service, State College. LAURENCE C. WHITEHEAD, district agent, in charge.

State-wide activities in the control of predators and injurious rodents. In North Carolina, Florida, Georgia, South Carolina, and Virginia.

Swanquarter

Swanquarter Migratory Bird Refuge.—New Holland, N. C., MAYNARD S. JOHNSON, assistant refuge manager, in charge.

Land purchased in 1931 and 1932 under provisions of the Migratory Bird Conservation Act, and adjacent open water areas closed by Presidential Proclamation of July 18, 1935, to protect swans and other wild fowl. In Hyde County. Acreage, 42,949.

Washington

Game protection.—P. O. Box 47. WILLIAM L. BIRSCH, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act.

NORTH DAKOTA

Construction and C. C. C. operations.—(See Omaha, Nebr.)

Disease control research.—(See Brigham, Utah.)

Federal aid in wildlife restoration.—(See Omaha, Nebr.)

Food habits research.—(See Burns, Oreg.; Denver, Colo.; and Brigham, Utah.)

Forest fauna research.—(See St. Paul, Minn.)

Game management surveys.—(See Boise, Idaho; Jackson, Wyo.; and Cache, Okla.)

Game protection.—(See Aberdeen, S. Dak.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Denver, Colo., and Edwardsville, Ill.)

National wildlife-refuge supervision.—(See Omaha, Nebr.)

Predator and rodent control.—(See Mitchell, S. Dak.)

Regional office.—(See Omaha, Nebr.)

Amison

*White Lake Migratory Waterfowl Refuge.*³—1936. In Slope County. Acreage, 960.

Ardoch

*Ardoch Lake Migratory Waterfowl Refuge.*³—1935. In Walsh County. Acreage, 2,713.

Binford

*Sibley Lake Migratory Waterfowl Refuge.*³—1936. In Griggs County. Acreage, 1,077.

³ An area being developed and operated as a refuge for ducks, geese, upland game birds, and other wildlife, under perpetual easements obtained from the owners in the year shown after the name of the refuge. Administrative officer, Burnie Maurek, regional director, 406 Post Office Building, Omaha, Nebr.

Blaisdell

*Shell Lake Migratory Waterfowl Refuge.*³—1935. In Mountrail County. Acreage, 1,680.

Bottineau

*Lords Lake Migratory Waterfowl Refuge.*³—1935. In Bottineau and Rolette Counties. Acreage, 1,905.

Bowman

*Stewart Lake Migratory Waterfowl Refuge.*³—1936. In Slope County. Acreage, 1,910.

Brinsmade

*Silver Lake Migratory Waterfowl Refuge.*³—1936. In Benson County. Acreage, 3,188.

Cayuga

*Lake Tewaukan Migratory Waterfowl Refuge.*³—1935. In Sargent County. Acreage, 4,665.

Churchs Ferry

*Lac Aux Mortes Migratory Waterfowl Refuge.*³—1935. In Ramsey County. Acreage, 5,848.

Crocus

*Brumba Migratory Waterfowl Refuge.*³—1937. In Towner County. Acreage, 1,977.

*Snyder Lake Migratory Waterfowl Refuge.*³—1936. In Towner County. Acreage, 1,550.

Devils Lake

*Minnewastena Migratory Waterfowl Refuge.*³—1936. In Benson County. Acreage, 144.

Dogden

*Cottonwood Lake Migratory Waterfowl Refuge.*³—1936. In McHenry County. Acreage, 1,024.

³ See footnote 3, p. 73.

Dunn Center

*Lake Ilo Migratory Waterfowl Refuge.*³—1936. In Dunn County. Acreage, 3,050.

Dunseith

*Rabb Lake Migratory Waterfowl Refuge.*³—1936. In Rolette County. Acreage, 261.

*School Section Lake Migratory Waterfowl Refuge.*³—1936. In Rolette County. Acreage, 680.

*Willow Lake Migratory Waterfowl Refuge.*³—1935. In Rolette County. Acreage, 2,852.

Ellendale

*Maple River Migratory Waterfowl Refuge.*³—1935. In Dickey County. Acreage, 1,120.

Esmond

*Buffalo Lake Migratory Waterfowl Refuge.*³—1935. In Pierce County. Acreage, 2,081.

Fargo

Predator and rodent control.—LAWRENCE M. CHENEY, junior district agent, in charge.

Flasher

*Lake Patricia Migratory Waterfowl Refuge.*³—1936. In Morton County. Acreage, 1,440.

Fort Totten

Sullys Hill Game Preserve.—WESLEY D. PARKER, U. S. game management agent, in charge.

Established by act of Congress of June 30, 1914, and placed under full administration of the Department of Agriculture by act of Congress of March 3, 1931, to protect small exhibition herds of buffaloes, elk, and white-tailed deer, and to protect ducks, geese, and upland game birds. Recreational facilities maintained. In Benson County, on the south side of Devils Lake. Acreage, 994.

³ See footnote 3, p. 73.

Foxholm

Upper Souris Migratory Waterfowl Refuge.—F. SHELDON DART, junior refuge manager, in charge.

Established by Executive order of August 27, 1935, to protect ducks, geese, swans, sand-hill cranes, sandpipers, plovers, Hungarian partridges, pheasants, white-tailed deer, and other wildlife. In Renville and Ward Counties, 70 miles up the Souris River from the Lower Souris Refuge. Acreage, 31,655.

Hankinson

*Lake Elsie Migratory Waterfowl Refuge.*³—1936. In Richland County. Acreage, 647.

Harvey

*Sheyenne Lake Migratory Waterfowl Refuge.*³—1935. In Sheridan County. Acreage, 789.

Hastings

*Stoney Slough Migratory Waterfowl Refuge.*³—1936. In Barnes County. Acreage, 2,000.

Hazelton

*Appert Lake Migratory Waterfowl Refuge.*³—1935. In Emmons County. Acreage, 1,155.

*Little Lake Migratory Waterfowl Refuge.*³—1935. In Emmons County. Acreage, 480.

Jud

*Bonehill Creek Migratory Waterfowl Refuge.*³—1935. In La Moure County. Acreage, 640.

Kellys

Kellys Slough Migratory Waterfowl Refuge.—BURNIE MAUREK, regional director (see Omaha, Nebr.), in charge.

Established by Executive order of March 19, 1936, to protect ducks, geese, upland game birds, and other wildlife. In Grand Forks County. Acreage, 1,634, of which all but 680 acres were acquired by perpetual easement.³

³ See footnote 3, p 73.

Kenmare

Des Lacs Migratory Waterfowl Refuge.—SETH H. LOW, junior refuge manager, in charge.

Established by Executive order of August 22, 1935, to protect ducks, geese, western willets, avocets, grebes, coots, Franklin's gulls, and other wildlife. In Burke and Ward Counties. Acreage, 14,097.

Kensal

Arrowwood Migratory Waterfowl Refuge.—LYNN GRINER, junior refuge manager, in charge.

Established by Executive order of September 4, 1935, to protect ducks, geese, swans, shore birds, and upland game birds. In Stutsman and Foster Counties; embraces Arrowwood, Jim, and Mud Lakes. Acreage, 13,501.

Kongsberg

*Wintering River Migratory Waterfowl Refuge.*³—1935. In McHenry County. Acreage, 399.

Lakota

*Rose Lake Migratory Waterfowl Refuge.*³—1936. In Nelson County. Acreage, 1,280.

Linton

*Flickertail Migratory Waterfowl Refuge.*³—1935. In Emmons County. Acreage, 640.

*Springwater Migratory Waterfowl Refuge.*³—1935. In Emmons County. Acreage, 640.

Loma

*Billings Lake Migratory Waterfowl Refuge.*³—1935. In Cavalier County. Acreage, 760.

Lostwood

Lostwood Migratory Waterfowl Refuge.—Kenmare, N. Dak. SETH H. LOW, junior refuge manager, in charge.

Established by Executive order of September 4, 1935, to protect ducks, geese, killdeers, lesser yellowlegs, willets, grebes,

³ See footnote 3, p. 73.

terns, gulls, sharp-tailed grouse, Hungarian partridges, and other wildlife. In Burke and Mountrail Counties, near the village of Lostwood. Acreage, 23,829.

Ludden

*Dakota Lake Migratory Waterfowl Refuge.*³—1936. In Dickey County. Acreage, 3,768.

McHenry

*Johnson Lake Migratory Waterfowl Refuge.*³—1935. In Eddy and Nelson Counties. Acreage, 1,768.

McKenzie

*Wildfang Lake Migratory Waterfowl Refuge.*³—1936. In Burleigh County. Acreage, 560.

Makoti

*Hiddenwood Lake Migratory Waterfowl Refuge.*³—1936. In McLean and Ward Counties. Acreage, 568.

*Painted Woods Migratory Waterfowl Refuge.*³—1936. In McLean County. Acreage, 957.

Medina

*Half-Way Migratory Waterfowl Refuge.*³—1935. In Stutsman County. Acreage, 160.

Michigan

*Lambs Lake Migratory Waterfowl Refuge.*³—1936. In Nelson County. Acreage, 1,289.

Milnor

*Storm Lake Migratory Waterfowl Refuge.*³—1935. In Sargent County. Acreage, 682.

³ See footnote 3, p. 73.

Moffit

Long Lake Migratory Bird Refuge.—BURNIE MAUREK, regional director (see Omaha, Nebr.), in charge.

Established by Executive order of February 25, 1932, and since then enlarged by easements,³ to protect ducks, sandpipers, avocets, willets, coots, gulls, terns, and other birds. In Burleigh and Kidder Counties, 40 miles east of Bismarck. Acreage, 17,458, of which 7,044 were purchased.

Mott

*Charles Lake Migratory Waterfowl Refuge.*³—1936. In Hettinger County. Acreage, 800.

New Leipzig

*Pretty Rock Migratory Waterfowl Refuge.*³—1936. In Grant County. Acreage, 800.

New Salem

*Lake Oliver Migratory Waterfowl Refuge.*³—1936. In Oliver County. Acreage, 640.

Niagara

*Little Goose Migratory Waterfowl Refuge.*³—1935. In Grand Forks County. Acreage, 359.

Parshall

*Lake Susie Migratory Waterfowl Refuge.*³—1936. In McLean County. Acreage, 480.

Petersburg

*Prairie Lake Migratory Waterfowl Refuge.*³—1935. In Nelson County. Acreage, 320.

³ See footnote 3, p. 73.

Pettibone

Chase Lake Bird³ Refuge.—BURNIE MAUREK, regional director (see Omaha, Nebr.), in charge.

Established by Executive order of August 28, 1928, and enlarged since then by easements,³ to protect ducks, gulls, white pelicans, shore birds, grouse, and other wildlife. In Stutsman and Kidder Counties. Acreage, 2,858.

Pleasant Lake

*Pleasant Lake Migratory Waterfowl Refuge.*³—1935. In Benson County. Acreage, 987.

Ransom

*Wild Rice Migratory Waterfowl Refuge.*³—1936. In Sargent County. Acreage, 775.

Regan

*Canfield Lake Migratory Waterfowl Refuge.*³—1935. In Burleigh County. Acreage, 453.

*Lake Moraine Migratory Waterfowl Refuge.*³—1936. In Burleigh County. Acreage, 320.

Rock Lake

*Rock Lake Migratory Waterfowl Refuge.*³—1935. In Towner County. Acreage, 5,542.

Rogers

*Tomahawk Migratory Waterfowl Refuge.*³—1936. In Barnes County. Acreage, 440.

Ruso

*Camp Lake Migratory Waterfowl Refuge.*³—1936. In McLean County. Acreage, 1,212.

Stanley

*Clearwater Migratory Waterfowl Refuge.*³—1935. In Mountrail County. Acreage, 187.

³ See footnote 3, p. 73.

Streeter

*Lake George Migratory Waterfowl Refuge.*³—1935. In Kidder County. Acreage, 3,113.

Temvik

*Sunburst Lake Migratory Waterfowl Refuge.*³—1935. In Emmons County. Acreage, 495.

Tokio

*Wood Lake Migratory Waterfowl Refuge.*³—1935. In Benson County. Acreage, 400.

Tolna

Stump Lake Bird Refuge.—BURNIE MAUREK, regional director (see Omaha, Nebr.), in charge.

Established by Executive order of March 9, 1905, to protect grebes, gulls, terns, ducks, phalaropes, and other birds. In Nelson County; embraces four small islands in Stump Lake. Acreage, 27.

Turtle Neck

*Lake Nettie Migratory Waterfowl Refuge.*³—1935. In McLean County. Acreage, 1,800.

Tuttle

*Hutchinson Lake Migratory Waterfowl Refuge.*³—1935. In Kidder County. Acreage, 479.

Upham

Lower Souris Migratory Waterfowl Refuge.—C. J. HENRY, assistant refuge manager, in charge.

Established by Executive order of September 4, 1935, to protect ducks, geese, grouse, Hungarian partridges, prairie chickens, beavers, deer, and other wildlife. In Bottineau and McHenry Counties; extends 40 miles along the Souris River. Acreage, 58,543.

³ See footnote 3, p. 73.

Valley City

*Hobart Lake Migratory Waterfowl Refuge.*³—1936. In Barnes County. Acreage, 1,797.

Van Hook

*Legion Lake Migratory Waterfowl Refuge.*³—1936. In Mountrail County. Acreage, 920.

Washburn

*Lost Lake Migratory Waterfowl Refuge.*³—1935. In McLean County. Acreage, 960.

Whitman

*Pioneer Lake Migratory Waterfowl Refuge.*³—1935. In Walsh County. Acreage, 640.

Wilton

*Yanktonai Migratory Waterfowl Refuge.*³—1935. In McLean County. Acreage, 913.

Wing

*Florence Lake Migratory Waterfowl Refuge.*³—1935. In Burleigh County. Acreage, 670.

Zahl

*Lake Zahl Migratory Waterfowl Refuge.*³—1936. In Williams County. Acreage, 3,595.

OHIO

Construction and C. C. C. operations.—(See Boston, Mass.)

Federal aid in wildlife restoration.—(See Milwaukee, Wis.)

Game protection.—(See Henderson, Ky., and Sylvania, Ohio.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Edwardsville, Ill., and Charleston, S. C.)

National wildlife-refuge supervision.—(See Milwaukee, Wis.)

Regional office.—(See Milwaukee, Wis.)

Rodent control.—(See La Fayette, Ind.)

³ See footnote 3, p. 73.

Columbus

Cooperative wildlife research unit.—Care of Ohio State University.
LAWRENCE E. HICKS, biologist, in charge.

Research on wildlife management problems. In Ohio, Illinois, Indiana, Kentucky, Michigan, and West Virginia.

In cooperation with Ohio State University, Ohio State Department of Agriculture (Division of Conservation), and the American Wildlife Institute.

Sylvania

Game protection.—P. O. Box 134. FRED BRINT, agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In northern Ohio, northern Indiana, and the southern tier of counties in Michigan.

Toledo

West Sister Island Migratory Bird Refuge.—DANIEL H. JANZEN, regional director (see Milwaukee, Wis.), in charge.

Established by Executive order of August 2, 1938, to protect migratory waterfowl. An important black-crowned night heron rookery. In Lucas County, on Lake Erie. Acreage, 82.

OKLAHOMA

Construction and C. C. C. operations.—(See New Orleans, La.)

Cooperative wildlife research unit.—(See Columbia, Mo., and College Station, Tex.)

Disease control research.—(See Brigham, Utah.)

Federal aid in wildlife restoration.—(See Albuquerque, N. Mex.)

Food habits research.—(See Denver, Colo., Pilot Town, La., Burns, Oreg., and Brigham, Utah.)

Forest fauna research.—(See Gulfport, Miss.)

Game management surveys.—(See Cache, Okla.; Boise, Idaho; and Jackson, Wyo.)

Land acquisition.—(See Denver, Colo.)

Migratory birds research.—(See Denver, Colo.)

National wildlife-refuge supervision.—(See Albuquerque, N. Mex.)

Regional office.—(See Albuquerque, N. Mex.)

Cache

Game management surveys.—Care of Wichita Mountains Wildlife Refuge. CHARLES H. ROUSE, associate biologist, and FRANK B. McMURRAY, junior biologist, in charge.

Habit and management studies on big-game animals, wild turkeys, small game birds; adjustments of range and general wildlife resource surveys. In Minnesota, Wisconsin, and all States west of the Mississippi River.

Wichita Mountains Wildlife Refuge.—GEORGE E. MUSHBACH, superintendent, in charge.

Transferred from the United States Forest Service to the Biological Survey by act of Congress of June 4, 1936, to protect herds of buffaloes, elk, and white-tailed deer, a small herd of Texas long-horns, as well as wild turkeys that were planted there and other wildlife. One-third of the area developed for recreational use. In Comanche County; embraces most of Wichita Mountains. Acreage, 61,480.

Cherokee

Salt Plains Wildlife Refuge.—DONALD A. GILCHRIST, regional director (see Albuquerque, N. Mex.), in charge.

Established by Executive order of March 26, 1930, to protect ducks, geese, Franklin's gulls, bitterns, rails, and other wildlife. In Alfalfa County. Acreage, 19,459.

Oklahoma City

Game protection.—345 Federal Building. MILTON H. BOONE, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Oklahoma.

Predator and rodent control.—345 Federal Building. A. E. GRAY, district agent, in charge.

State-wide activities in the control of (1) wolves, coyotes, and other animals killing stock and game in Oklahoma, Arkansas, and Missouri, and (2) injurious rodents in Oklahoma and Kansas.

In cooperation with State Game and Fish Commission; extension service, State Agricultural and Mechanical College; and the Missouri Department of Conservation.

OREGON

- Disease control research.*—(See Los Angeles, Calif.; Brigham, Utah; and Pullman, Wash.)
- Food habits research.*—(See Burns, Oreg.; Sacramento, Calif.; Denver, Colo.; and Brigham, Utah.)
- Game management surveys.*—(See Boise, Idaho; Seattle, Wash.; Jackson, Wyo.; and Cache, Okla.)
- Land acquisition.*—(See Denver, Colo.)
- Migratory birds research.*—(See Berkeley, Calif.)
- Rabbit production research.*—(See Fontana, Calif.)

Brookings

Goat Island Migratory Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of May 6, 1935, to protect California gulls, murres, cormorants, and puffins. In Curry County, off the coast of Oregon. Acreage, 21.

Burns

Food habits research.—Care of Malheur Migratory Bird Refuge. CLARENCE A. SOOTER, junior biologist, in charge.

Experimental propagation of waterfowl and waterfowl food in the wild. In Minnesota, Wisconsin, and all States west of the Mississippi River.

Malheur Migratory Bird Refuge.—JOHN C. SCHARFF, superintendent, in charge.

Established by Executive order of August 18, 1908, to protect ducks, geese, swans, pelicans, grebes, gulls, terns, cormorants, ibises, herons, sand-hill cranes, sage grouse, antelopes, deer, beaver, and other wildlife. In Harney County. Acreage, 159,966.

Corvallis

Cooperative wildlife research unit.—Care of Oregon State Agricultural College. ARTHUR S. EINARSEN, associate biologist, in charge.

Research on wildlife management problems. In Oregon, Washington, and California.

In cooperation with Oregon State Agricultural College, Oregon State Game Commission, and the American Wildlife Institute.

Hermiston

Cold Springs Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of February 25, 1909, to protect ducks, geese, swans, herons, grouse, and other birds. In Umatilla County, on the Umatilla reclamation project. Acreage, 2,677.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Klamath Falls

Klamath Lake Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of August 8, 1908, to protect ducks, geese, coots, gulls, and shore birds. In Siskiyou County, Calif., and Klamath County, Oreg. Acreage 81,619.

In cooperation with Bureau of Reclamation, Department of the Interior.

Upper Klamath Wildlife Refuge.—P. O. Box 50, Merrill. CLINTON G. FAIRCHILD, assistant refuge manager, in charge.

Established by Executive order of April 3, 1928, to protect ducks, geese, and other birds. In Klamath County, on the west side of Upper Klamath Lake, within the Klamath reclamation project. Acreage, 8,140.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Lakeview

Hart Mountain Antelope Refuge.—JEAN F. BRANSON, superintendent, in charge.

Established by Executive order of December 21, 1936, primarily to protect and perpetuate antelopes, as well as protect mule deer, sage grouse, fur animals, waterfowl, and other wildlife. In Lake County, near Lakeview. Acreage, 214,475.

Netarts

Cape Meares Migratory Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland), in charge.

Established by Executive order of August 19, 1938, to protect migratory birds, band-tailed pigeons, grouse, shore birds, black-tailed deer, and black bear. In Tillamook County, about 1

mile from the Three Arch Rocks Migratory Bird Refuge. Acreage, 139.

Pendleton

McKay Creek Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland), in charge.

Established by Executive order of June 7, 1927, to protect ducks, geese, and other wildlife. In Umatilla County, on the Umatilla reclamation project. Acreage, 1,813.

In cooperation with Bureau of Reclamation, Department of the Interior.

Predator and rodent control.—HAROLD W. DOBYNS, junior district agent, in charge.

Portland

Construction and C. C. C. operations.—404 U. S. Courthouse. WILFRED J. GREGSON, C. C. C. inspector, in charge.

Supervision and coordination of C. C. C. work at Bureau camps, being responsible for efficiency and economy of operations and for compliance with Bureau and C. C. C. requirements. In Oregon, California, Colorado, Idaho, Nevada, Utah, Washington, and Wyoming.

In cooperation with the Civilian Conservation Corps.

Control methods research.—401 U. S. Courthouse. WILLIAM E. FAIR, district investigator, in charge.

Research and field tests of poisoning and trapping methods for the control of predatory animals and injurious rodents.

Federal aid in wildlife restoration.—404 U. S. Courthouse. JAMES C. SAVAGE, assistant regional inspector, in charge.

General supervision in all matters pertaining to the Federal Aid to Wildlife Restoration Act; subject to instructions from the regional director. In region No. 1, comprising Oregon, California, Nevada, and Washington,

Forest fauna research.—404 U. S. Courthouse. ALBERT W. MOORE, associate biologist, in charge.

Research on life history and habits of birds and mammals as related to grazing lands, forests, and forest reproduction. In Oregon and Washington.

In cooperation with United States Forest Service.

Game protection.—403 U. S. Courthouse. JAMES GEROW, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Oregon.

Predator and rodent control.—401 U. S. Courthouse. ROY FUGATE, district agent, in charge.

State-wide activities in the control of (1) wolves, coyotes, and other animals killing stock and game, and (2) pocket gophers, ground squirrels, and other injurious rodents.

In cooperation with extension service, Oregon State Agricultural College; Oregon State Department of Agriculture; and State Game Commission.

Regional office.—404 U. S. Courthouse. THOMAS B. MURRAY, regional director, in charge.

General supervision of all field activities of the Bureau of Biological Survey, except those pertaining to research, land acquisition, and importations of birds and mammals; subject to instructions directly from the Chief of Bureau or the chiefs of Washington divisions and sections. In region No. 1 (Pacific), comprising Washington, California, Nevada, and Oregon.

Redmond

Predator and rodent control.—FRED R. SANKEY, junior district agent, in charge.

Roseburg

Predator and rodent control.—ARTHUR K. CREWS, junior district agent, in charge.

Tillamook

Three Arch Rocks Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland), in charge.

Established by Executive order of October 14, 1907, to protect puffins, guillemots, murres, gulls, petrels, and cormorants. In Tillamook County; embraces a group of small islands on the coast, north of Netarts Bay. Acreage, 17.

PENNSYLVANIA

Construction and C. C. C. operations.—(See Boston, Mass.)

Disease control research.—(See Bowie, Md.)

Federal aid in wildlife restoration.—(See Boston, Mass.)

- Food habits research.*—(See Bowie, Md.)
Fur-animal research.—(See Saratoga Springs and Ithaca, N. Y., Cambridge, Md., and Swarthmore, Pa.)
Game management surveys.—(See Bowie, Md.)
Game protection.—(See Pleasantville, N. J., and Owego, N. Y.)
Land acquisition.—(See Washington, D. C.)
Migratory birds research.—(See Charleston, S. C.)
Regional office.—(See Boston, Mass.)
Rodent control.—(See Boston, Mass.)

Lansdowne

Control methods research.—40 North Maple Avenue. JAMES C. MUNCH, consulting senior pharmacologist, in charge.

Philadelphia

Inspection of importations.—220 East Lancaster Avenue, Ardmore. WILLIAM L. BAILY, inspector of foreign birds and mammals, in charge.

Inspection at the port of Philadelphia of importations of foreign birds and wild animals to prevent the introduction of harmful species.

State College

Cooperative wildlife research unit.—Care of Pennsylvania State College. LOGAN J. BENNETT, biologist, in charge.

Research on wildlife management problems. In Pennsylvania, Delaware, Maryland, New Jersey, New York, and West Virginia.

In cooperation with Pennsylvania State College and the Pennsylvania Game Commission.

Swarthmore

Fur-animal research.—Swarthmore College. ROBERT K. ENDERS, biologist, in charge.

Under the Bankhead-Jones special research project, conducts investigations on reproductive cycles of minks, silver foxes, muskrats, and other fur-bearing animals. In Pennsylvania, Delaware, Maryland, New Jersey, and New York.

In cooperation with the Department of Embryology, Carnegie Institution of Washington; and Swarthmore College.

PUERTO RICO

Culebra Bird Refuge:

Established by Executive order of February 27, 1909, to protect gulls, terns, Bahama ducks, herons, coots, ground doves, and other birds. Embraces a number of small islands on the east coast. Acreage, 3,000.

RHODE ISLAND

Construction and C. C. C. operations.—(See Boston, Mass.)

Cooperative wildlife research unit.—(See Orono, Maine.)

Federal aid in wildlife restoration.—(See Boston, Mass.)

Forest fauna research.—(See New Haven, Conn.)

Fur-animal research.—(See Saratoga Springs and Ithaca, N. Y.)

Game protection.—(See South Weymouth, Mass.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

Regional office.—(See Boston, Mass.)

Rodent control.—(See New Haven, Conn., and Boston, Mass.)

SOUTH CAROLINA

Construction and C. C. C. operations.—(See Atlanta, Ga.)

Cooperative wildlife research unit.—(See Auburn, Ala.)

Federal aid in wildlife restoration.—(See Atlanta, Ga.)

Food habits research.—(See Pilot Town, La.)

Land acquisition.—(See Washington, D. C.)

National wildlife-refuge supervision.—(See Atlanta, Ga.)

Predator and rodent control.—(See Raleigh, N. C.)

Regional office.—(See Atlanta, Ga.)

Savannah River Wildlife Refuge.—(See Savannah, Ga.)

Charleston

Migratory birds research.—R. F. D. No. 1, Box 171. HAROLD S. PETERS, associate biologist, in charge.

Investigations of abundance, movements and factors affecting migratory waterfowl along the Atlantic coast and Eastern States located on the Atlantic Flyway. In South Carolina, Alabama, Connecticut, Delaware, District of Columbia, Florida, Georgia, Kentucky, Maine, Maryland, Massachusetts, Michigan, Mississippi, North Carolina, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Tennessee, Vermont, Virginia, West Virginia, Canada, and Newfoundland.

In cooperation with State and Provincial game departments of the United States, Canada, and Newfoundland, and with cooperating observers.

Native game-bird research.—P. O. Box 231. HAROLD L. BLAKEY, associate biologist, in charge.

Investigations of (1) the life history and habits of native game birds and (2) refuge ecology. In South Carolina, Alabama, Florida, Georgia, Kentucky, Maryland, North Carolina, Tennessee, and Virginia.

McBee

Carolina Sandhills Wildlife Refuge.—P. O. Box 30. WILLIAM F. HOPKINS, assistant refuge manager, in charge.

Established by Executive order of March 17, 1939, to protect quail, wild turkey, waterfowl, and other wildlife. In Chesterfield County. Acreage, about 50,000.

In cooperation with the State Forestry Commission of South Carolina.

McClellanville

Cape Romain Migratory Bird Refuge.—ANDREW H. DUPRE, junior refuge manager, in charge.

Designated a closed area, on which the hunting of migratory birds is forbidden, by Presidential Proclamation of June 6, 1932, to protect ducks, curlews, egrets, herons, pelicans, ibises, sanderlings, dowitchers, oyster catchers, sea turtles, diamond-back terrapins, and other wildlife. Bull Island was included by Executive order of March 13, 1936. In Charleston County. Acreage, 60,326.

Game protection.—JAMES B. SHULER, agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In South Carolina.

SOUTH DAKOTA

Construction and C. C. C. operations.—(See Omaha, Nebr.)

Cooperative wildlife research unit.—(See Ames, Iowa.)

Disease control research.—(See Brigham, Utah.)

Federal aid in wildlife restoration.—(See Omaha, Nebr.)

Food habits research.—(See Burns, Oreg.; Denver, Colo.; and Brigham, Utah.)

Forest fauna research.—(See St. Paul, Minn.)

Game management surveys.—(See Boise, Idaho; Jackson, Wyo.; and Cache, Okla.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Denver, Colo., and Edwardsville, Ill.)

National wildlife-refuge supervision.—(See Omaha, Nebr.)

Regional office.—(See Omaha, Nebr.)

Aberdeen

Game protection.—303 Post Office Building. P. O. Box 906. LEO R. CHILDERS, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In South Dakota and North Dakota.

Columbia

Sand Lake Migratory Waterfowl Refuge.—PHILIP A. DUMONT, assistant refuge manager, in charge.

Established by Executive order of September 4, 1935, to protect geese, ducks, Franklin's gulls, marbled godwits, avocets, willets, phalaropes, sandpipers, grebes, and other wildlife. In Brown County, on the James River. Acreage, 21,133.

Fort Pierre

Predator and rodent control.—T. J. TURNER, junior district agent, in charge.

Fruitdale

Belle Fourche Bird Refuge.—BURNIE MAUREK, regional director (see Omaha, Nebr.), in charge.

Established by Executive order of February 25, 1909, to protect ducks, geese, curlews, prairie chickens, pheasants, grouse, and other wildlife. In Butte County, on the Belle Fourche reclamation project. Acreage, 13,680.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Howard

*Twin Lakes Migratory Waterfowl Refuge.*³—1937. In Miner County. Acreage, 277.

³ See footnote 3, p. 73.

Lake Andes

Lake Andes Migratory Waterfowl Refuge.—BURNIE MAUREK, regional director (see Omaha, Nebr.), in charge.

Established by Executive order of February 14, 1936, to protect ducks, geese, gulls, pelicans, coots, plovers, curlews, cranes, and other birds. In Charles Mix County. Acreage, 363.

Martin

Lacreek Migratory Waterfowl Refuge.—EARL W. CRAVEN, junior refuge manager, in charge.

Established by Executive order of August 26, 1935, to protect ducks, geese, upland game birds, and other wildlife. In Bennett County. Acreage, 6,807.

Mitchell

Predator and rodent control.—Room 6, Post Office Building. LOUIS KNOWLES, district agent, in charge.

State-wide activities in the control of (1) wolves, coyotes, and other animals killing stock and game, and (2) prairie dogs, ground squirrels, and other injurious rodents. In South Dakota and North Dakota.

In cooperation (in rodent control) with extension division, State College of Agriculture.

Parker

Predator and rodent control.—R. A. ROWE, junior district agent, in charge.

Sturgis

*Bear Butte Migratory Waterfowl Refuge.*³—1937. In Meade County. Acreage, 325.

Waubay

Waubay Migratory Waterfowl Refuge.—WATSON E. BEED, junior refuge manager, in charge.

Established by Executive order of December 10, 1935, to protect ducks, geese, white pelicans, gulls, coots, upland game birds, and other wildlife. In Day County, in the center of the South Dakota lake region. Acreage, 3,248.

³ See footnote 3, p. 73.

TENNESSEE

- Construction and C. C. C. operations.*—(See New Orleans, La.)
Cooperative wildlife research unit.—(See Auburn, Ala.; Blacksburg, Va.; and Columbia, Mo.)
Federal aid in wildlife restoration.—(See New Orleans, La.)
Food habits research.—(See Pilot Town, La.)
Land acquisition.—(See Des Moines, Iowa.)
Migratory birds research.—(See Edwardsville, Ill., and Charleston, S. C.)
National wildlife-refuge supervision.—(See New Orleans, La.)
Native game-bird research.—(See Charleston, S. C.)
Regional office.—(See New Orleans, La.)
Rodent control.—(See State College, Miss.)

Hornbeak

Lake Isom Migratory Waterfowl Refuge.—ROY MOORE, regional director (see New Orleans, La.), in charge.

Established by Executive order of August 12, 1938, to protect ducks, American egrets, herons, ibises, anhingas, and sandpipers. In Lake and Obion Counties. Acreage, 1,521.

Memphis

Game protection.—318 Federal Building. P. O. Box 493. JOHN C. KNOX, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Tennessee and northwestern Mississippi.

TEXAS

- Construction and C. C. C. operations.*—(See New Orleans, La.)
Disease control research.—(See Brigham, Utah.)
Federal aid in wildlife restoration.—(See Albuquerque, N. Mex.)
Food habits research.—(See Pilot Town, La.; Burns, Oreg.; Denver, Colo.; and Brigham, Utah.)
Forest fauna research.—(See Gulfport, Miss.)
Game management surveys.—(See Boise, Idaho; Jackson, Wyo.; Carlsbad, N. Mex.; Van Horn, Tex.; and Cache, Okla.)
Game protection.—(See Albuquerque, N. Mex.; and Corpus Christi, Fort Worth, and Houston, Tex.)
Land acquisition.—(See Denver, Colo.)

Migratory birds research.—(See Denver, Colo., and Edwardsville, Ill.)

National wildlife-refuge supervision.—(See Albuquerque, N. Mex.)

Regional office.—(See Albuquerque, N. Mex.)

Austwell

Aransas Migratory Waterfowl Refuge.—JAMES O. STEVENSON, assistant refuge manager, in charge.

Established by Executive order of December 31, 1937, to protect ducks, geese, wild turkeys, quail, sand-hill and whooping cranes, white-tailed deer, and other wildlife. In Aransas and Refugio Counties, on the Gulf of Mexico. Acreage, 46,450.

College Station

Cooperative wildlife research unit.—Care of Texas Agricultural and Mechanical College. Box 254 F. E. WALTER P. TAYLOR, senior biologist, in charge.

Research on wildlife management problems. In Texas, Arkansas, Louisiana, New Mexico, and Oklahoma.

In cooperation with the Texas Agricultural and Mechanical College; Texas Game, Fish, and Oyster Commission; and the American Wildlife Institute.

Predator and rodent control.—RICHARD B. HICKERSON, agent, in charge.

Corpus Christi

Game protection.—P. O. Box 468. CALVIN H. JENNINGS, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In south central Texas.

Fort Worth

Game protection.—421 Federal Building. R. D. HILDEBRAND, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In northeastern Texas.

Predator and rodent control.—E. T. PERSONNETT, junior district agent, and JOE B. LINDSEY, agent, in charge.

Houston

Game protection.—1017 Federal Building, P. O. Box 4026.
FRANK CLARKSON, United States game management agent,
in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory
Bird Hunting Stamp Act, and Lacey Act. In southeastern
Texas.

Laredo

Predator and rodent control.—A. B. BYNUM, junior district agent,
in charge.

Lubbock

Predator and rodent control.—J. E. BARKER, agent, in charge.

Marfa

Predator and rodent control.—H. NELSON ELLIOTT, agent, in
charge.

Muleshoe

Muleshoe Migratory Waterfowl Refuge.—P. O. Box 126. JAMES
K. WALTON, junior refuge manager, in charge.

Established by Executive order of October 24, 1935, to protect
ducks, geese, coots, sand-hill cranes, plovers, and other wildlife.
In Bailey County. Acreage, 5,809.

Nacogdoches

Predator and rodent control.—DANIEL M. FOSTER, agent, in
charge.

San Angelo

Predator and rodent control.—JOHN E. BOOG-SCOTT, JR., agent,
in charge.

San Antonio

Predator and rodent control.—298 Federal Building. CEDRIC
R. LANDON, district agent, in charge.

State-wide activities in the control of (1) wolves, coyotes, and
other animals killing stock and game, and (2) pocket gophers,
ground squirrels, prairie dogs, and other injurious rodents.

In cooperation with State Livestock Sanitary Commission
and the extension service, State Agricultural College.

Van Horn

Game management surveys.—ROBERT J. SNOW, agent, in charge.

A study of the limiting factors governing the increase of big-horn sheep in the Guadalupe Mountains of New Mexico and Texas.

In cooperation with the Texas Game, Fish, and Oyster Commission, New Mexico State Game and Fish Commission, and United States Forest Service. (Effective March 1, 1939.)

UTAH

Construction and C. C. C. operations.—(See Portland, Oreg.)

Disease control research.—(See Los Angeles, Calif., and Brigham, Utah.)

Federal aid in wildlife restoration.—(See Denver, Colo.)

Food habits research.—(See Bingham, Utah; Denver, Colo.; and Burns, Oreg.)

Forest fauna research.—(See Berkeley, Calif.)

Game management surveys.—(See Boise, Idaho; Seattle, Wash.; Jackson, Wyo.; and Cache, Okla.)

Land acquisition.—(See Denver, Colo.)

Migratory birds research.—(See Berkeley, Calif., and Denver, Colo.)

National wildlife-refuge supervision.—(See Denver, Colo.)

Regional office.—(See Denver, Colo.)

Brigham

Bear River Migratory Bird Refuge.—VANEZ T. WILSON, superintendent, in charge.

Established by act of Congress of April 23, 1928, to protect ducks, geese, shore birds, and other wildlife. In Box Elder County, on the Bear River marshes. Acreage, 64,376.

Disease control research.—Care of Bear River Migratory Bird Refuge. ERLING R. QUORTRUP, assistant veterinarian, in charge.

Laboratory and field investigations on the diseases of birds and other wildlife; study of the etiology and methods of prevention and cure of these diseases. In Minnesota, Wisconsin, and all States west of the Mississippi River.

Food habits research.—Care of Bear River Migratory Bird Refuge. CECIL S. WILLIAMS, assistant biologist, in charge.

Investigations of waterfowl foods and nesting habits of waterfowl; factors affecting the development and maintenance of areas for waterfowl production in the Great Basin region. In Minnesota, Wisconsin, and all States west of the Mississippi River.

Locomotive Springs Migratory Bird Refuge.—LEO L. LAYTHE, regional director (see Denver, Colo.), in charge.

Established by Executive order of September 29, 1931, to protect waterfowl and other wildlife. In Box Elder County, on the shore of Bay River Bay. Acreage, 1,031.

Logan

Cooperative wildlife research unit.—Care of Utah State Agricultural College. D. IRVIN RASMUSSEN, associate biologist, in charge.

Research on wildlife management problems. In Utah, Arizona, California, Colorado, Idaho, Nevada, and New Mexico.

In cooperation with the Utah State Agricultural College, Utah State Fish and Game Commission, and the American Wildlife Institute.

Ogden

Game protection.—306 Federal Building. CLIFFORD L. FRETWELL, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Utah.

Provo

Strawberry Valley Bird Refuge.—LEO L. LAYTHE, regional director (see Denver, Colo.), in charge.

Established by Executive order of February 25, 1909, to protect ducks, sage hens, and other wildlife. In Wasatch County, on the Strawberry Valley reclamation project. Acreage, 14,080.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Salt Lake City

Predator and rodent control.—456 Federal Building. R. SCOTT ZIMMERMAN, district agent, in charge.

State-wide activities in the control of (1) wolves, coyotes, and other animals killing stock and game, and (2) pocket gophers, ground squirrels, prairie dogs, and other injurious rodents.

In cooperation with State Department of Agriculture, and extension service, Utah State College of Agriculture.

VERMONT

Construction and C. C. C. operations.—(See Boston, Mass.)

Cooperative wildlife research unit.—(See Orono, Maine.)

Federal aid in wildlife restoration.—(See Boston, Mass.)

Forest fauna research.—(See New Haven, Conn.)

Fur-animal research.—(See Saratoga Springs and Ithaca, N. Y.)

Game protection.—(See Portland, Maine.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

Regional office.—(See Boston, Mass.)

Rodent control.—(See Boston, Mass., and Portland, Maine.)

VIRGINIA

Construction and C. C. C. operations.—(See Atlanta, Ga.)

Disease control research.—(See Bowie, Md.)

Federal aid in wildlife restoration.—(See Atlanta, Ga.)

Food habits research.—(See Bowie, Md.)

Fur-animal research.—(See Cambridge, Md.)

Game management surveys.—(See Bowie, Md.)

Game protection.—(See Cambridge, Md., and Tappahannock, Va.)

Land acquisition.—(See Washington, D. C.)

Migratory birds research.—(See Charleston, S. C.)

National wildlife-refuge supervision.—(See Atlanta, Ga.)

Native game-bird research.—(See Charleston, S. C.)

Predator and rodent control.—(See Washington, D. C., and Raleigh, N. C.)

Regional office.—(See Atlanta, Ga.)

Blacksburg

Cooperative wildlife research unit.—Care of Virginia Polytechnic Institute. CHARLES O. HANDLEY, associate biologist, in charge.

Research on wildlife management problems. In Virginia, Kentucky, Maryland, North Carolina, Tennessee, and West Virginia.

In cooperation with Virginia Polytechnic Institute, Virginia Commission of Game and Inland Fisheries, and the American Wildlife Institute.

Pungo

Back Bay Migratory Waterfowl Refuge.—HARRY A. BAILEY, assistant refuge manager, in charge.

Established by Executive order of June 6, 1938, to protect ducks, geese, brant, and other wildlife. In Princess Anne County. Acreage, 4,577.

Tappahannock

Game protection.—P. O. Box 173. EARNEST R. ATKINSON, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Virginia, except Accomac and Northampton Counties, and in the District of Columbia, and those areas of Maryland counties along the Potomac River.

Winchester

Control methods research.—180³ Valley Avenue. HENRY J. SPENCER, district investigator, in charge.

Research and field tests of poisoning and trapping methods for the control of injurious rodents.

WASHINGTON

Construction and C. C. C. operations.—(See Portland, Oreg.)

Cooperative wildlife research unit.—(See Corvallis, Oreg.)

Disease control research.—(See Pullman, Wash., and Brigham, Utah.)

Federal aid in wildlife restoration.—(See Portland, Oreg.)

Food habits research.—(See Sacramento, Calif., Burns, Oreg., Denver, Colo., and Brigham, Utah.)

Forest fauna research.—(See Portland, Oreg.)

Game management surveys.—(See Seattle, Wash.; Boise, Idaho; Cache, Okla.; and Jackson, Wyo.)

Land acquisition.—(See Denver, Colo.)

Migratory birds research.—(See Berkeley, Calif.)

Rabbit production research.—(See Fontana, Calif.)

Regional office.—(See Portland, Oreg.)

Cape Flattery to Grays Harbor

Copalis Rock, Flattery Rocks, and Quillayute Needles Bird Refuges.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of October 23, 1907, to protect puffins, guillemots, murre, gulls, petrels, and cormorants. In Grays Harbor, Jefferson, and Clallam Counties; three refuges include practically all coastal islands from Cape Flattery south to Grays Harbor. Acreage, 247; of which Copalis Rock contains 5, Flattery Rocks, 125, and Quillayute Needles, 117.

Flattery Rocks Bird Refuge.—(See preceding.)

Quillayute Needles Bird Refuge.—(See preceding.)

Cheney

Turnbull Migratory Waterfowl Refuge.—JOHN D. CONNORS, junior refuge manager, in charge.

Established by Executive order of July 30, 1937, to protect waterfowl. In Spokane County. Acreage, 12,202.

Colville

Little Pend Oreille Wildlife Refuge.—JOHN E. SCHWARTZ, assistant refuge manager, in charge.

Established to protect Idaho, or Pend Oreille, white-tailed deer, and Rocky Mountain mule deer, grouse, mink, marten, muskrats, bears, beavers, and waterfowl. In Stevens County. Acreage, about 48,000.

Conconully

Conconully Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of February 25, 1909, to protect ducks, geese, Hungarian partridges, and other birds. In

Okanogan County, on the Okanogan Reclamation Project. Acreage, 270.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Dungeness

Dungeness Spit Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of January 20, 1915, to protect ducks, grebes, loons, gulls, and other birds. In Clallam County; a spit in the mouth of the Dungeness River projecting into the Strait of Juan de Fuca; Dungeness Lighthouse Reservation within the refuge. Acreage, 227.

In cooperation with the Bureau of Lighthouses, Department of Commerce.

Ephrata

Lenore Lake Migratory Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of December 11, 1936, to protect ducks, geese, grebes, sandpipers, avocets, greater yellow-legs, killdeers, and other birds. In Grant County. Acreage, 6,159, part of which has been withdrawn for development in the Columbia River Basin reclamation project.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Friday Harbor

Jones Island Migratory Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of March 30, 1937, to protect migratory birds and other wildlife. In San Juan County, in the San Juan Channel. Acreage, 179.

Matia Island Migratory Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of March 30, 1937, to protect migratory birds and other wildlife. In San Juan County. Acreage, 145.

Naselle

Willapa Harbor Migratory Bird Refuge.—P. O. Box 38, Seaview. EUGENE E. CRAWFORD, junior refuge manager, in charge.

Established by Executive order of January 22, 1937, to protect black brant, ducks, geese, shore birds, and other wildlife. In Pacific County. Acreage, 2,930.

In cooperation with the War Department and the Treasury Department.

Olympia

Game protection.—101 Old State Capitol Building. ROBERT S. BACH, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act.

Predator and rodent control.—101 Old State Capitol Building. JOHN Finley, district agent, in charge.

State-wide activities in the control of (1) wolves, coyotes, and other animals killing stock and game, and (2) ground squirrels and other injurious rodents.

In cooperation with State Department of Agriculture and the extension service, Washington State College.

Port Townsend

Smith Island Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of June 6, 1914, to protect grebes, guillemots, murrees, cormorants, ducks, and other birds. In Island County; embraces Smith and Minor Islands in the Strait of Juan de Fuca; Smith Island Lighthouse Reservation within the refuge. Acreage, 65.

Pullman

Disease control research.—Care of E. E. Wegner, Washington State College. F. D. McKenney, associate veterinarian, in charge.

Laboratory and field investigations on the diseases of fur animals, including study of etiology of and methods of preventing and curing the diseases. In Washington, Idaho, Montana, and Oregon.

In cooperation with Washington State College.

Seattle

Alaska game law enforcement.—1523 Smith-Tower Building.
 _____, wildlife agent. In district No. 15.

Game management surveys.—105 Anderson Hall, University of Washington. VICTOR B. SCHEFFER, junior biologist, in charge.

Game management and population studies of all species of wildlife, with special reference to fur bearers. In Washington, California, Idaho, Nevada, Oregon, and Utah.

Game protection.—1523 Smith-Tower Building. WEBSTER H. RANSOM, United States game management agent and deputy Alaska wildlife agent, in charge.

Mainly enforcement of the Lacey Act and Alaska Game Law, and incidentally enforcement of the Migratory Bird Treaty Act and Migratory Bird Hunting Stamp Act. In Washington.

Tacoma

Rodent control.—CLARENCE A. TUCKER, agent, in charge.

Walla Walla

Columbia River Bird Refuge.—THOMAS B. MURRAY, regional director (see Portland, Oreg.), in charge.

Established by Executive order of August 28, 1926, to protect ducks, geese, herons, and other birds. In Walla Walla County; embraces two small islands in the Columbia River, at the mouth of the Walla Walla River. Acreage, 8.

WEST VIRGINIA

Construction and C. C. C. operations.—(See Boston, Mass.)

Cooperative wildlife research unit.—(See Columbus, Ohio; Blacksburg, Va.; and State College, Pa.)

Disease control research.—(See Bowie, Md.)

Federal aid in wildlife restoration.—(See Milwaukee, Wis.)

Game management surveys.—(See Bowie, Md.)

Game protection.—(See Henderson, Ky.)

Land acquisition.—(See Des Moines, Iowa.)

Migratory birds research.—(See Charleston, S. C.)

National wildlife-refuge supervision.—(See Milwaukee, Wis.)

Regional office.—(See Milwaukee, Wis.)

Rodent control.—(See Washington, D. C.)

WISCONSIN

- Construction and C. C. C. operations.*—(See Boston, Mass.)
Cooperative wildlife research unit.—(See Ames, Iowa.)
Disease control research.—(See Brigham, Utah.)
Food habits research.—(See Burns, Oreg.; Denver, Colo.; and Brigham, Utah.)
Forest fauna research.—(See St. Paul, Minn.)
Game management surveys.—(See Boise, Idaho; Jackson, Wyo.; and Cache, Okla.)
Land acquisition.—(See Des Moines, Iowa.)
Migratory birds research.—(See Edwardsville, Ill.)
National wildlife-refuge supervision.—(See Milwaukee, Wis.)
Rodent control.—(See La Fayette, Ind.)
Upper Mississippi River Wildlife and Fish Refuge.—(See Winona, Minn.)

Green Bay

Long Tail Point Migratory Waterfowl Refuge.—DANIEL H. JANZEN, regional director (see Milwaukee), in charge.

Established by Executive order of October 23, 1936, to protect ducks, geese, and other birds. In Brown County, 4 miles from the mouth of the Fox River where it empties into Green Bay. Acreage, 103.

Milwaukee

Federal aid in wildlife restoration.—3174 Plankinton Arcade Building. MELVIN O. STEEN, regional inspector, in charge.

General supervision in all matters pertaining to the Federal Aid to Wildlife Act; subject to instructions from the regional director. In region No. 6, comprising Wisconsin, Illinois, Indiana, Kentucky, Michigan, Ohio, and West Virginia.

Regional office.—3174 Plankinton Arcade Building. DANIEL H. JANZEN, regional director, in charge.

General supervision of all field activities of the Biological Survey, except those pertaining to research, land acquisition, and importations of birds and mammals; subject to instructions directly from the Chief of Bureau or the chiefs of Washington divisions and sections. In region No. 6 (East Central), comprising Wisconsin, Illinois, Indiana, Kentucky, Michigan, Ohio, and West Virginia.

Necedah

Necedah Migratory Waterfowl Refuge.—ROBLEY W. HUNT, assistant refuge manager, in charge.

Established by Executive order of March 14, 1939, to protect migratory waterfowl, grouse, mourning doves, bobwhites, deer, sandhill cranes, and other wildlife. In Juneau County. Acreage, about 40,000.

In cooperation with the Wisconsin State Conservation Commission.

Oshkosh

Game protection.—205 Federal Building. P. O. Box 341. EDWARD T. CARTER, United States game management agent, in charge.

Enforcement of the Migratory Bird Treaty Act, Migratory Bird Hunting Stamp Act, and Lacey Act. In Wisconsin.

Trempealeau

Trempealeau Migratory Waterfowl Refuge.—Winona, Minn. RAY C. STEELE, superintendent, in charge.

Established by Executive order of August 22, 1936, to protect ducks, geese, upland game birds, and fur-bearing animals. In Buffalo and Trempealeau Counties. Acreage, 707.

Washington Island

Gravel Island Bird Refuge.—DANIEL H. JANZEN, regional director (see Milwaukee), in charge.

Established by Executive order of January 9, 1913, to protect herring gulls and wildlife. In Door County; embraces Gravel and Spider Islands in Lake Michigan near the northern extremity of county. Acreage, 27.

Green Bay Bird Refuge.—DANIEL H. JANZEN, regional director (see Milwaukee), in charge.

Established by Executive order of February 21, 1912, to protect herring gulls. In Door County, near the northeast extremity, on Hog Island, half a mile east of Washington Island. Acreage, 2.

WYOMING

Construction and C. C. C. operations.—(See Portland, Oreg.)

Disease control research.—(See Brigham, Utah.)

- Federal aid in wildlife restoration.*—(See Denver, Colo.)
Foods habits research.—(See Burns, Oreg.; Denver, Colo.; and Brigham, Utah.)
Game management surveys.—(See Jackson, Wyo.; Boise, Idaho; and Cache, Okla.)
Game protection.—(See Billings, Mont.)
Land acquisition.—(See Denver, Colo.)
Migratory birds research.—(See Denver, Colo.)
National wildlife-refuge supervision.—(See Denver, Colo.)
Regional office.—(See Denver, Colo.)

Casper

Pathfinder Wildlife Refuge.—LEO L. LAYTHE, regional director (see Denver, Colo.), in charge.

Established by Executive order of April 19, 1928, to protect ducks, geese, antelopes, and other wildlife. In Natrona and Carbon Counties, on the North Platte reclamation project. Acreage, 39,174.

In cooperation with the Bureau of Reclamation, Department of the Interior.

Cheyenne

Predator and rodent control.—308 New Federal Building. P. O. Box 215. ADOLPH S. HAMM, district agent, in charge.

State-wide activities in the control of (1) wolves, coyotes, and other animals killing stock and game, and (2) prairie dogs, ground squirrels, and other injurious rodents. In Wyoming and Nebraska.

In cooperation with State Department of Agriculture, and extension service, College of Agriculture, University of Wyoming.

Jackson

Elk Refuge.—ALMER P. NELSON, United States reservation protector, in charge.

Established under act of Congress of August 10, 1912, as a winter feeding ground for elk from Yellowstone National Park and adjacent national forests, and to protect mule deer, ducks, geese, and sage grouse. In Jackson Hole, Teton County. Acreage, 25,755.

Game management surveys.—OLAUS J. MURIE, biologist, in charge.

Studies of feeding, breeding, and other habits of mountain sheep and other big-game animals, knowledge of which because

of a dwindling population, is essential to successful management of wild herds and satisfactory adjustment. In Minnesota, Wisconsin, and all States west of the Mississippi River.

Laramie

Bamforth Lake Migratory Bird Refuge.—LEO L. LAYTHE, regional director (see Denver, Colo.), in charge.

Established by Executive order of January 29, 1932, to protect ducks, geese, and other birds. In Albany County. Acreage, 1,166.

Hutton Lake Migratory Bird Refuge.—LEO L. LAYTHE, regional director (see Denver, Colo.), in charge.

Established by Executive order of January 28, 1932, to protect ducks, geese, and other birds. In Albany County. Acreage, 1,401.

Lusk

Predator and rodent control.—E. G. ALBERT, junior district agent, in charge.

Rock Springs

Predator and rodent control.—ORIN L. ROBINSON, junior district agent, in charge.

Sheridan

Predator and rodent control.—OLIVER S. ROBINSON, junior district agent, in charge.

SUMMARY AND INDEX OF FIELD ACTIVITIES

Construction and C. C. C. operations:

Georgia: Atlanta, 36.
Louisiana: New Orleans, 46.
Massachusetts: Boston, 51.
Nebraska: Omaha, 62.
Oregon: Portland, 87.

Federal aid in wildlife restoration:

Colorado: Denver, 29.
Georgia: Atlanta, 36.
Iowa: Des Moines, 43.
Louisiana: New Orleans, 46.
Massachusetts: Boston, 51.
Nebraska: Omaha, 63.
New Mexico: Albuquerque, 67.
Oregon: Portland, 87.
Wisconsin: Milwaukee, 105.

Game management:

GAME PROTECTION:

Alabama: Montgomery, 17.
Alaska Game Commission:
Juneau, 18.
Alaska wildlife agents (head-
quarters):
Anchorage (district No. 9),
17.
Cordova (district No. 4), 17.
Dillingham (district No. 8),
17.
Fairbanks (district No. 11),
18.
Fort Yukon (district No.
10), 18.
Juneau (district No. 1), 18.
Ketchikan (district No. 3),
21.
McGrath (district No. 7),
21.
Marshall (district No. 14),
22.
Nome (district No. 13), 22.
Petersburg (district No. 2),
22.

Game management—Continued.

GAME PROTECTION—Continued.

Alaska Game Commission—
Continued.
Alaska Wildlife agents—Con.
Ruby (district No. 12), 22.
Seattle, Wash., (district No.
15), 104.
Seward (district No. 5), 22.
Unalaska (district No. 6), 22.
Arizona: Phoenix, 23.
Arkansas: Little Rock, 24.
California:
Berkeley, 26.
Los Angeles, 27.
Colorado: Denver, 30.
Florida: Daytona Beach, 34.
Georgia: Savannah, 38.
Idaho: Boise, 39.
Illinois:
Chicago, 41.
Peoria, 42.
Iowa: Des Moines, 43.
Kansas: Garden City, 44.
Kentucky: Henderson, 45.
Louisiana: New Orleans, 46.
Maine: Portland, 49.
Maryland: Cambridge, 50.
Massachusetts: South Wey-
mouth, 52.
Michigan: Bay City, 52.
Minnesota: St. Paul, 55.
Missouri:
Jefferson City, 57.
St. Louis, 57.
Montana: Billings, 58.
Nebraska: Omaha, 63.
New Jersey: Pleasantville, 67.
New Mexico: Albuquerque, 68.
New York: Owego, 71.
North Carolina: Washington,
73.
Ohio: Sylvania, 83.
Oklahoma: Oklahoma City, 84.

Game management—Continued.

GAME PROTECTION—Continued.

- Oregon: Portland, 88.
 South Carolina: McClellanville, 91.
 South Dakota: Aberdeen, 92.
 Tennessee: Memphis, 94.
 Texas:
 Corpus Christi, 95.
 Fort Worth, 95.
 Houston, 96.
 Utah: Ogden, 98.
 Virginia: Tappahannock, 100.
 Washington:
 Olympia, 103.
 Seattle, 104.
 Wisconsin: Oshkosh, 106.

INSPECTION OF IMPORTATIONS:

- California:
 Los Angeles, 27.
 San Diego, 28.
 San Francisco, 28.
 Hawaii: Honolulu, 39.
 Massachusetts: Boston, 51.
 New York: New York, 71.
 Pennsylvania: Philadelphia, 89.

Land acquisition:

- Colorado: Denver, 30.
 District of Columbia: Washington, 32.
 Iowa: Des Moines, 43.

National wildlife refuges:

REFUGES:

- Alabama:
 Decatur (Wheeler), 15.
 Mobile (Petit Bois), 17.
 Alaska:
 Juneau (the following refuges in the Territory:
 Alaska Railway, Aleutian Islands, Bering Sea, Bogoslof, Chamisso, Curry, Forrester Island, Hazen Bay, Hazy Islands, Nuniyak Island, St. Lazararia, Semidi, and Tuxedni), 19-21.
 Arizona:
 Roosevelt (Salt River), 23.
 St. Johns (Apache), 23.
 Yuma (Cabeza Prieta and Kofa), 23-24.
 Arkansas:
 Manila (Big Lake), 25.
 St. Charles (White River), 25.

National wildlife refuges—Continued.

REFUGES—Continued.

- California:
 Alturas (Clear Lake), 25.
 Calipatria (Salton Sea), 26.
 San Francisco (Farallon), 28.
 Tulelake (Tule Lake), 28.
 Willows (Sacramento), 29.
 Delaware: Smyrna (Bombay Hook), 32.
 Florida:
 Boca Grande (Island Bay, Matlacha Pass, and Pine Island), 33.
 Brooksville (Chinsegut), 34.
 Cedar Keys (Cedar Keys), 34.
 Fort Myers (Caloosahatchee), 34.
 Key West (Great White Heron and Key West), 34.
 New Smyrna (Brevard), 35.
 St. Augustine (Matanzas), 35.
 St. Marks (St. Marks), 35.
 St. Petersburg (Indian Key, Palma Sola, and Passage Key), 35-36.
 Sebastian (Pelican Island), 36.
 Georgia:
 Darien (Wolf Island), 37.
 Eatonton (Piedmont), 37.
 Sapelo (Blackbeard Island), 37.
 Savannah (Savannah River and Tybee), 38.
 Waycross (Okefenokee), 38.
 Hawaii:
 Honolulu (Hawaiian Islands), 38.
 Johnston Island (Johnston Island), 38.
 Idaho:
 Hamer (Camas), 40.
 Nampa (Deer Flat and Snake River), 40.
 Rupert (Miridoka), 41.
 Illinois: Havana (Chautauqua), 42.
 Iowa: Algona (Union Slough), 43.
 Kentucky: Eddyville (Kentucky Woodlands), 45.
 Louisiana:
 Houma (East Timbalier), 45.
 Lake Arthur (Lacassine), 45.
 Olga (Breton), 47.

National wildlife refuges—Continued.

REFUGES—Continued.

- Louisiana—Continued.
 - Pilot Town (Delta and Tern Islands), 47.
 - Sulphur (Sabine), 47.
 - Weeks Island (Shell Keys), 48.
- Maine:
 - Belfast (Widows Island), 48.
 - Calais (Moosehorn), 48.
- Maryland:
 - Bowie (Patuxent), 50.
 - Cambridge (Blackwater), 50.
- Michigan:
 - Eagle River (Siskiwit), 53.
 - Germfask (Seney), 53.
 - Huron (Huron), 53.
- Minnesota:
 - Aitkin (Rice Lake), 54.
 - Dundee (Talcot), 54.
 - Isle (Mille Lacs), 54.
 - Middle River (Mud Lake), 54.
 - Rochert (Tamarac), 54.
 - Winona (Upper Mississippi River), 55.
- Mississippi:
 - Hampton (Yazoo), 56.
 - Starkville (Noxubee), 56.
- Missouri:
 - Mound City (Squaw Creek), 57.
 - Sumner (Swan Lake), 57.
- Montana:
 - Gilman (Pishkun and Willow Creek), 58-59.
 - Glasgow (Fort Peck Game), 59.
 - Great Falls (Benton Lake), 59.
 - Lakeview (Red Rock Lakes), 59.
 - Malta (Lake Bowdoin), 60.
 - Medicine Lake (Medicine Lake), 60.
 - Miles City (Fort Keogh), 60.
 - Moiese (National Bison), 60.
 - Pablo (Pablo), 61.
 - Ronan (Nine-Pipe), 61.
- Easement refuges:
 - Havre (Greedmans Coulee and Lake Thibadeau), 59.
 - Malta (Hewitt Lake), 60.
 - Rapelje (Hailstone and Halfbreed Lake), 61.
 - Roundup (Lake Mason), 61.
 - Turner (Black Coulee), 61.

National wildlife refuges—Continued.

REFUGES—Continued.

- Montana—Continued.
 - Easement refuges—Contd.
 - Wibaux (Lamesteer), 61.
- Nebraska:
 - Ellsworth (Crescent Lake), 62.
 - Minatare (North Platte), 62.
 - Valentine (Fort Niobrara and Valentine), 63.
- Nevada:
 - Currant (Railroad Valley), 64.
 - Elko (Ruby Lake), 64.
 - Fallon (Fallon), 64.
 - Las Vegas (Boulder Canyon and Desert Game), 65.
 - Sutcliffe (Anaho), 65.
 - Vya (Charles Sheldon), 65-66.
 - Winnemucca (Winnemucca), 66.
- New Jersey: Salem (Killcohook), 67.
- New Mexico:
 - Carlsbad (Carlsbad), 68.
 - Elephant Butte (Rio Grande), 69.
 - Roswell (Bitter Lakes), 69.
 - Socorro (Bosque del Apache), 69.
- New York:
 - Hampton Bays (Shinnecock), 70.
 - Montauk (Fort Tyler), 70.
 - Seneca Falls (Montezuma), 71.
- North Carolina:
 - Manteo (Pea Island), 72.
 - New Holland (Mattamuskeet), 72.
 - Swanquarter (Swanquarter), 72.
- North Dakota:
 - Fort Totten (Sullys Hill Game), 75.
 - Foxholm (Upper Souris), 76.
 - Kellys (Kellys Slough), 76.
 - Kenmare (Des Lacs), 77.
 - Kensal (Arrowwood), 77.
 - Lostwood (Lostwood), 77.
 - Moffit (Long Lake), 79.
 - Pettibone (Chase Lake), 80.
 - Tolna (Stump Lake), 81.
 - Upham (Lower Souris), 81.
- Easement refuges:
 - Amison (White Lake), 73.
 - Ardoch (Ardoch Lake), 73.

National wildlife refuges—Continued.

REFUGES—Continued.

North Dakota—Continued.

Easement refuges—Contd.

- Binford (Sibley Lake), 73.
 Blaisdell (Shell Lake), 74.
 Bottineau (Lords Lake), 74.
 Bowman (Stewart Lake),
 74.
 Brinsmade (Silver Lake),
 74.
 Cayuga (Lake Tewaukan),
 74.
 Churchs Ferry (Lac Aux
 Mortes), 74.
 Crocus (Brumba and Snyder
 Lake), 74.
 Devils Lake (Minnewas-
 tena), 74.
 Dodgen (Cottonwood Lake),
 74.
 Dunn Center (Lake Ilo), 75.
 Dunseith (Rabb Lake,
 School Section Lake, and
 Willow Lake), 75.
 Ellendale (Maple River),
 75.
 Esmond (Buffalo Lake), 75.
 Flasher (Lake Patricia), 75.
 Hankenson (Lake Elsie), 76.
 Harvey (Sheyenne Lake),
 76.
 Hastings (Stoney Slough),
 76.
 Hazelton (Appert Lake and
 Little Lake), 76.
 Jud (Bonehill Creek), 76.
 Kongsberg (Wintering Riv-
 er), 77.
 Lakota (Rose Lake), 77
 Linton (Springwater and
 Flickertail), 77.
 Loma (Billings Lake), 77.
 Ludden (Dakota Lake), 78.
 McHenry (Johnson Lake),
 78.
 McKenzie (Wildfang Lake),
 78.
 Makoti (Hiddenwood Lake
 and Painted Woods), 78.
 Medina (Half-Way), 78.
 Michigan (Lambs Lake), 78.
 Milnor (Storm Lake), 78.
 Mott (Charles Lake), 79.
 New Leipzig (Pretty Rock),
 79.
 New Salem (Lake Oliver), 79.
 Niagara (Little Goose), 79.
 Parshall (Lake Susie), 79
 Petersburg (Prairie Lake),
 79.

National wildlife refuges—Continued.

REFUGES—Continued.

North Dakota—Continued.

Easement refuges—Contd.

- Pleasant Lake (Pleasant
 Lake), 80.
 Ransom (Wild Rice), 80.
 Regan (Lake Moraine and
 Canfield Lake), 80.
 Rock Lake (Rock Lake), 80.
 Rogers (Tomahawk), 80.
 Ruso (Camp Lake), 80.
 Stanley (Clearwater), 80.
 Streeter (Lake George), 81.
 Temvik (Sunburst Lake),
 81.
 Tokio (Wood Lake Marsh),
 81.
 Turtle Neck (Lake Nettie),
 81.
 Tuttle (Hutchinson Lake),
 81.
 Valley City (Hobart Lake),
 82.
 Van Hook (Legion Lake),
 82.
 Washburn (Lost Lake), 82
 Whitman (Pioneer Lake),
 82.
 Wilton (Yanktonai), 82.
 Wing (Florence Lake), 82.
 Zahl (Lake Zahl), 82.
 Ohio: Toledo (West Sister Is-
 land), 83.
 Oklahoma:
 Cache (Wichita Moun-
 tains), 84.
 Cherokee (Salt Plains), 84.
 Oregon:
 Brookings (Goat Island), 85.
 Burns (Malheur), 85.
 Hermiston (Cold Springs),
 86.
 Klamath Falls (Klamath
 Lake and Upper Klam-
 ath), 86.
 Lakeview (Hart Mountain),
 86.
 Netarts (Cape Meares), 86.
 Pendleton (McKay Creek),
 87.
 Tillamook (Three Arch
 Rocks), 88.
 Puerto Rico: (Culebra), 90.
 South Carolina:
 McBee (Carolina Sand-
 hills), 91.
 McClellanville (Cape Ro-
 main), 91.

National wildlife refuges—Continued.

REFUGES—Continued.

- South Dakota:
 Columbia (Sand Lake), 92.
 Fruitdale (Belle Fourche), 92.
 Lake Andes (Lake Andes), 93.
 Martin (Lacreek), 93.
 Waubay (Waubay), 93.
 Easement refuge:
 Howard (Twin Lakes), 92.
 Sturgis (Bear Butte), 93.
 Tennessee: Hornbeak (Lake Isom), 94.
 Texas:
 Austwell (Aransas), 95.
 Muleshoe (Muleshoe), 96.
 Utah:
 Brigham (Bear River and Locomotive Springs), 97-98.
 Provo (Strawberry Valley), 98.
 Virginia: Pungo (Back Bay), 100.
 Washington:
 Cape Flattery to Grays Harbor (Copalis Rock, Flattery Rocks, and Quillayute Needles), 101.
 Cheney (Turnbull), 101.
 Colville (Little Pend Orille), 101.
 Conconully (Conconully), 101.
 Dungeness (Dungeness Spit), 102.
 Ephrata (Lenore Lake), 102.
 Friday Harbor (Jones Island and Matia Island), 102.
 Naselle (Willapa Harbor), 102.
 Port Townsend (Smith Island), 103.
 Wallula (Columbia River), 104.
 Wisconsin:
 Green Bay (Long Tail Point), 105.
 Necedah (Necedah), 106.
 Trempealeau (Trempealeau), 106.
 Washington Island (Gravel Island and Green Bay), 106.
 Wyoming:
 Casper (Pathfinder), 107.
 Jackson (Elk), 107.
 Laramie (Bamforth Lake and Hutton Lake), 108.

National wildlife refuges—Continued.

REFUGE SUPERVISION:

- Colorado: Denver, 30.
 Georgia: Atlanta, 36.
 Louisiana: New Orleans, 46.
 Nebraska: Omaha, 63.
 New Mexico: Albuquerque, 63.

Predator and rodent control:

AGENTS:

- Alaska:
 Anchorage, 17.
 Juneau, 19.
 Arizona: Phoenix, 23.
 California:
 Sacramento, 28.
 Ukiah, 29.
 Colorado:
 Denver, 30.
 Grand Junction, 31.
 Monte Vista, 31.
 Montrose, 31.
 Connecticut:
 New Haven, 32.
 District of Columbia: Washington, 33.
 Idaho:
 Boise, 39.
 Carey, 40.
 Lewiston, 40.
 Pocatello, 40.
 Indiana: La Fayette, 42.
 Maine: Portland, 49.
 Massachusetts:
 Boston, 52.
 Worcester, 52.
 Mississippi: State College, 56.
 Montana:
 Billings, 58.
 Bozeman, 58.
 Great Falls, 59.
 Nevada: Reno, 65.
 New Jersey: New Brunswick, 67.
 New Mexico: Albuquerque, 68.
 New York: Ithaca, 70.
 North Carolina: Raleigh, 72.
 North Dakota: Fargo, 75.
 Oklahoma: Oklahoma City, 84.
 Oregon:
 Pendleton, 87.
 Portland, 88.
 Redmond, 88.
 Roseburg, 88.
 South Dakota:
 Fort Pierre, 92.
 Mitchell, 93.
 Parker, 93.

Predator and rodent control—Continued.

AGENTS—Continued.

Texas:

College Station, 95.
 Fort Worth, 95.
 Laredo, 96.
 Lubbock, 96.
 Marfa, 96.
 Nacogdoches, 96.
 San Angelo, 96.
 San Antonio, 96.

Utah: Salt Lake City, 99.

Washington:

Olympia, 103.
 Tacoma, 104.

Wyoming:

Cheyenne, 107.
 Lusk, 108.
 Rock Springs, 108.
 Sheridan, 108.

CONTROL METHODS RESEARCH:

California: Sacramento, 27.
 Colorado: Denver, 29.
 New York: Poughkeepsie, 71.
 Oregon: Portland, 87.
 Pennsylvania: Lansdowne, 89.
 Virginia: Winchester, 100.

U. S. BIOLOGICAL SURVEY SUPPLY DEPOT:

Idaho: Pocatello, 40.

Regional offices:

Alaska: Juneau (region No. 10), 18.
 Colorado: Denver (region No. 2), 31.
 Georgia: Atlanta (region No. 7), 37.
 Iowa: Des Moines (region No. 4), 44.
 Louisiana: New Orleans (region No. 5), 46.
 Massachusetts: Boston (region No. 8), 51.
 Nebraska: Omaha (region No. 9), 63.
 New Mexico: Albuquerque (region No. 3), 68.
 Oregon: Portland (region No. 1), 88.
 Wisconsin: Milwaukee (region No. 6), 105.

Wildlife research:

COOPERATIVE WILDLIFE RESEARCH UNIT:

Alabama: Auburn, 15.
 Iowa: Ames, 43.
 Maine: Orono, 48.
 Missouri: Columbia, 57.
 Ohio: Columbus, 83.
 Oregon: Corvallis, 85.

Wildlife research—Continued.

COOPERATIVE WILDLIFE RESEARCH UNIT—Continued.

Pennsylvania: State College, 89.
 Texas: College Station, 95.
 Utah: Logan, 98.
 Virginia: Blacksburg, 100.

DISEASE CONTROL RESEARCH:

California: Los Angeles, 27.
 Maryland: Bowie, 49.
 Minnesota: Minneapolis, 54.
 Utah: Brigham, 97.
 Washington: Pullman, 103.

FOOD HABITS RESEARCH:

California: Sacramento, 27.
 Colorado: Denver (laboratory), 30.
 Louisiana: Pilot Town, 47.
 Maryland: Bowie, 50.
 Oregon: Burns, 85.
 Utah: Brigham, 98.

FOREST FAUNA RESEARCH:

California:
 Berkeley, 26.
 O'Neals, 27.
 Connecticut: New Haven, 31.
 Minnesota: St. Paul, 55.
 Mississippi: Gulfport, 56.
 Oregon: Portland, 87.

FUR-ANIMAL RESEARCH:

California: Fontana (rabbit station), 26.
 Maryland:
 Beltsville, 49.
 Cambridge (field station), 50.
 New York:
 Ithaca, 70.
 Saratoga Springs (experiment station), 71.
 Pennsylvania: Swarthmore, 89.

GAME MANAGEMENT SURVEYS:

Idaho: Boise, 39.
 Maryland: Bowie, 50.
 New Mexico: Carlsbad, 69.
 Oklahoma: Cache, 84.
 Texas: Van Horn, 97.
 Washington: Seattle, 104.
 Wyoming: Jackson, 107.

MIGRATORY-BIRD RESEARCH:

California: Berkeley, 26.
 Colorado: Denver, 30.
 Illinois: Edwardsville, 41.
 South Carolina: Charleston, 90.

NATIVE GAME-BIRD RESEARCH:

New York: Ithaca, 70.
 South Carolina: Charleston, 91.

WILDLIFE RESEARCH IN ALASKA:

Fairbanks, 18.
 Juneau, 19.

INDEX OF PERSONNEL

Albert, E. G., 108.
 Aldous, Clarence M., 48.
 Aldous, Shaler E., 55.
 Allen, Joseph Clark, 65.
 Allin, Curtis S., 57.
 Allison, Malcolm N., 23.
 Amundson, Geno A., 63.
 Ashbrook, Frank G., 12.
 Atkinson, Earnest R., 100.
 Atwood, Earl L., 45.

Bach, Robert S., 103.
 Bailey, Harry A., 100.
 Baily, William L., 89.
 Baker, Gerald, 45.
 Ball, J. N., 13.
 Banta, Gareld B., 21.
 Barker, J. E., 96.
 Barmeier, Harry, 57.
 Bassett, Charles F., 71.
 Bateman, Robert E., 58.
 Beed, Watson E., 93.
 Bell, W. B., 12.
 Bennett, Carey H., 30.
 Bennett, Logan J., 89.
 Benson, Norman J., 21.
 Birsch, William L., 73.
 Black, David V., 50.
 Blakey, Harold L., 91.
 Boog-Scott, John E., Jr. 96.
 Boone, Milton H., 84.
 Boring, Eugene M., 17.
 Boswell, John C. S., 38.
 Bowdish, Beecher S., 71.
 Brackett, Lee F., 52.
 Branson, Jean F., 86.
 Brint, Fred, 83.
 Burleigh, Thos. D., 56.
 Bynum, A. B., 96.

Callaghan, F. P., 13.
 Campbell, A. D., 69.
 Carson, Carlos M., 17.
 Carter, Edward T., 106.
 Carter, Hayden A., 37.
 Cash, Olin H., 25.
 Cheesman, Wm. H., 14.
 Cheney, Lawrence M., 75.
 Childers, Leo R., 92.
 Clarkson, Frank, 96.

Coburn, Don R., 49.
 Collins, Grenold, 22.
 Connors, John D., 101.
 Cook, Chas. S., 43.
 Cope, C. Edgar, 13.
 Coppess, Robert L., 55.
 Cottam, Clarence, 12.
 Crandall, Benjamin R., 31.
 Craven, Earl W., 93.
 Crawford, Eugene E., 102.
 Creaser, E. P., 36.
 Creech, Stephen, 52.
 Crews, Arthur K., 88.
 Crook, J. W., 31.
 Crouch, W. E., 13.
 Cruikshank, Carey G., 14.

Dalke, Paul D., 57.
 Dart, F. Sheldon, 76.
 Day, Albert M., 12.
 Deen, Robert B., 56.
 De Puy, Percy L., 57.
 Dieffenbach, Rudolph, 12.
 Dill, Herbert H., 64.
 Dillon, W. R., 13.
 Dobyons, Harold W., 87.
 Dozier, Herbert L., 50.
 Dufresne, Frank, 14, 18.
 DuMont, Philip A., 92.
 DuPre, Andrew H., 91.
 Dykstra, W. W., 52.

Earnshaw, Frank L., 13.
 Einarsen, Arthur S., 85.
 Elder, Alvin W., 27.
 Elliott, H. Nelson, 96.
 Elmer, A. C., 13.
 Enders, Robert K., 89.
 Evans, Benjamin L., 40.

Fair, William E., 87.
 Fairchild, Clinton G., 86.
 Farnham, Philip S., 71.
 Finley, John, 103.
 Fitch, Henry S., 27.
 Fleetwood, Raymond J., 37.
 Foster, Daniel M., 96.
 Fretwell, Clifford L., 98.
 Frost, Millard I., 36.
 Fugate, Roy, 88.
 Fullaway, D. T., 39.

- Gabrielson, Ira N., 12.
 Gallwas, Harold W., 22.
 Garlough, F. E., 29.
 Gatlin, J. C., 14, 68.
 Gerow, James, 88.
 Gigstead, Gilbert K., 54.
 Gilchrist, Donald A., 14, 68.
 Gillett, Francis C., 63.
 Gillham, Charles E., 41.
 Girard, George L., 61.
 Glaser, Frank, 17.
 Goldman, Luther C., 26.
 Goldman, Luther J., 26.
 Grand, Eugene F., 58.
 Gray, A. E., 84.
 Gray, Donald V., 35.
 Gray, H. Douglas, 19.
 Green, Dorr D., 13.
 Green, R. G., 54.
 Greene, Earle R., 34.
 Gregson, Wilfred J., 87.
 Griner, Lynn, 77.
 Gustafson, R. O., 13.

 Hackenberg, E. H., 46.
 Hajdukovich, John, 18.
 Hamlet, John N., 49.
 Hamm, Adolph S., 107.
 Handley, Charles O., 100.
 Hannum, Robert G., 27.
 Hanson, G. Hammond, 65.
 Hazeltine, B. M., 60.
 Heller, Edmund, 28.
 Henderson, W. C., 12.
 Henry, C. J., 81.
 Herholdt, John F., 32.
 Hickerson, Richard B., 95.
 Hicks, Lawrence E., 83.
 Hildebrand, R. D., 95.
 Hobbs, W. D., 14.
 Holmes, John Q., 44.
 Holman, George E., 39.
 Hopkins, John M., 38.
 Hopkins, William F., 91.
 Horn, E. E., 26.
 Horn, Thomas C., 60.
 Hossick, Geo. A., 13.
 Howard, William J., 36.
 Huey, Laurence M., 28.
 Hull, Archie V., 59.
 Hunt, Robley W., 106.

 Isaac, Robert, 32.

 Jackson, H. H. T., 12.
 Jacoby, Thos. E., 13.
 Janzen, Daniel H., 14, 105.
 Jarvis, Frank N., 33.
 Jennings, Calvin H., 95.
 Jewell, Homer W., 18.

 Johnson, C. S., 53.
 Johnson, Maynard S., 72.

 Kalmbach, E. R., 30.
 Kelsey, J. V., 34.
 Keyes, Joseph, 27.
 Kilby, John D., 47.
 Knopp, Edward C., 54.
 Knowles, Louis, 93.
 Knox, John C., 94.
 Krumm, Kenneth K., 57.
 Krummes, William T., 68.
 Kubichek, W. F., 13.

 Lamb, Samuel H., 47.
 Landon, Cedric R., 96.
 Lane, Guy W., 12.
 Lawhorn, Thomas R., 23.
 Lay, Geo. B., 52.
 Laythe, Leo L., 14, 31.
 Leichhardt, Chester A., 13.
 Licking, Clyde L., 63.
 Ligon, J. Stokley, 67.
 Lincoln, F. C., 12.
 Lindsey, Joe B., 95.
 Locke, S. Barry, 14, 51.
 Long, William H., 70.
 Loosli, John K., 70.
 Low, Seth H., 77.
 Lynch, John J., 47.

 McAtee, W. L., 12.
 McFarland, R. P., 31.
 McGuire, Thomas R. L., 38.
 McKenney, F. D., 103.
 McMullen, Peter C., 18.
 McMurray, Frank B., 84.
 Markley, Chester R., 15.
 Marshall, William H., 39.
 Martin, John M., 42.
 Maurek, Burnie, 14, 63.
 Mebane, Walter B., 24.
 Mercer, Everett M., 23.
 Merovka, Lawrence J., 46.
 Miller, Arthur F., 62.
 Miller, Howard A., 25.
 Miller, J. Paul, 12.
 Miller, Samuel T., 49.
 Mills, E. M., 67.
 Moore, Albert W., 87.
 Moore, Roy, 14, 46.
 Moore, S. C., 13.
 Morley, Leland C., 50.
 Munch, James C., 89.
 Murie, Olaus J., 107.
 Murray, Thomas B., 14, 88.
 Mushbach, George E., 84.

 Neff, Johnson A., 27.
 Nelson, Almer P., 107.

Nelson, Philip, 42.
 Nestler, Ralph B., 50.
 Norton, Robert S., 60.
 O'Connor, Charles J., 17.
 Oderkirk, Galen C., 42.
 Ohmer, Earl N., 18.
 Palmer, Lawrence J., 19.
 Parker, Wesley D., 75.
 Pearce, John, 31.
 Pearson, Allen M., 15.
 Pedersen, P. S. M., 13.
 Perry, John E., 41.
 Personnett, E. T., 95.
 Peters, Harold S., 90.
 Pettepher, Cecil B., 46.
 Plitt, Thora M., 49.
 Poley, Frank F., 30.
 Polson, William F., 29.
 Poole, Charles G., 28.
 Quick, Paul T., 40.
 Quortrup, Erling R., 97.
 Radway, Merton, 71.
 Ransom, Webster H., 104.
 Rasmussen, D. Irvin, 98.
 Regan, Harold J., 13.
 Rhode, Clarence J., 17.
 Riddick, George M., 39.
 Riemer, A. A., 12.
 Riter, W. E., 30.
 Roahen, Kenneth F., 58.
 Robinson, Lee F., 13.
 Robinson, Oliver S., 108.
 Robinson, Orin L., 108.
 Robinson, Weldon B., 70.
 Rouse, Charles H., 84.
 Rowe, R. A., 93.
 Rutherford, Robert M., 12.
 Salyer, J. C., II, 13.
 Sankey, Fred R., 88.
 Sans, E. R., 65.
 Sarber, Hosea, 22.
 Sargeant, Howard J., 40.
 Saunders, George B., 30.
 Savage, James C., 87.
 Schaefer, Walter P., 48.
 Scharff, John C., 85.
 Scheffer, Victor B., 104.
 Schwartz, John E., 101.
 Scott, Thomas G., 43.
 Sharp, Ward M., 63.
 Sheldon, H. P., 14.
 Shillinger, J. E., 12.

Shuler, James B., 91.
 Silver, James, 14, 37.
 Simons, Andrew A., 18.
 Snow, Robert J., 97.
 Soaper, Robert C., 45.
 Sooter, Clarence A., 85.
 Spencer, D. A., 71.
 Spencer, Henry J., 100.
 Stadlmeir, Albert, 67.
 Steele, Orin D., 50.
 Steele, Ray C., 55.
 Steen, Melvin O., 105.
 Stevenson, James O., 95.
 Sutherland, John H., 46.

Talbert, J. L., 14.
 Taylor, Walter P., 95.
 Taylor, William V., 13.
 Teckemeyer, O. W., 51.
 Templeton, George S., 26.
 Terhune, H. W., 13.
 Terry, Mary E., 28.
 Thompson, E. J., 13.
 Thompson, Jesse F., 43.
 Tonkin, George, 14, 44.
 Towle, Robert E., 65.
 Tucker, Clarence A., 104.
 Tumelson, Roy T., 40.
 Turner, T. J., 92.
 Twitchell, Leo S., 40.

Vail, Edward L., 27.
 Van Huizen, Peter J., 29.
 Vogen, Carl B., 54.

Walker, S. A., 72.
 Walton, James K., 96.
 Wardwell, Gilbert E., 62.
 Warwick, Jack W., 18.
 White, Sam O., 18.
 Whitehead, Laurence C., 72.
 Whitney, L. A., 39.
 Williams, Cecil S., 98.
 Williams, Frank P., 18.
 Williams, R. W., 13.
 Wilson, Vanez T., 97.
 Winslow, Ralph C., 40.
 Woodward, Doren E., 30.
 Worcester, Hugh M., 26.

Yelton, Vernon D., 68.

Zahniser, Howard, 14.
 Zimmerman, Earl, 69.
 Zimmerman, Fred R., 56.
 Zimmerman, R. Scott, 99.



